



TEX-MED ALLIANCES

ENI CBCMED Programme.

THE PROJECT BASE LINE

Output 3.1

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DISCLAIMER

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FORWARD.

This report refers to project output 3.1: Project Base Line of WP3.

It outlines the Base Line (including SWOT) of each of the regions being part of the project area as well as for the whole T/C industry of the area.

The Base Line represents the starting point of the Project and it provides its initial benchmark.

The analysis for each region/country were conducted by the local Project Partners following the methodology presented at the Project Kick off Meeting held in Barcelona (19-20 February 2020).

Project Partners were able to implement the local assessments in a limited timeframe by deploying exceptional resources in the activity in order to catch up with the initial project plan. This effort had also the outcome to avoid the slow-down of the Project/Programme activities due to the Covid-19 infection outbreak.

The Report consists of the following Parts:

Part 1. EXECUTIVE SUMMARY

Part 2. BASE LINES OF EACH REGION/COUNTRY (consisting of the following inputs):

1. Outline of the T/C sector in the region

a) Size

- Geographical perimeter of the sector
- Number of enterprises in the T/C Industry
- Total turnover of T/C Industry
- Total local employment direct
- Estimation of Total indirect employment
- Exports

b) Specialization

- Core activity of the sector (characterization)
- Typical or prevailing products
- Other relevant products
- Other relevant technologies/processes

2. History and Evolution

(of the T/C sector in the Region/Country)

- Driving forces of the past
- Subsequent evolution and changes
- Current situation

3. Swot Analysis

4. Characterization (of the T/C in each Region/Country)

- Distinctive features
- Critical factors and Key Issues
- What the Region/Country Needs
- What the Region/Country Offers

5. Perspectives

- On-going developments
- Emerging needs and forces

6. Key topics for the TEX-MED ALLIANCES project

- Internationalization
- Innovation
- Circular Economy

7. Key topics for the ENICBCMED Programme

- International Alliances

Part 3. CONCLUSION.

PART 1. EXECUTIVE SUMMARY

The T/C industry is a very significant sector in the Project area (i.e.: Catalonia, Toscana, Central Macedonia, Ben Arous, Mahdia, Monastir, Sousse, Tunis, Alexandria, Amman, Palestine) or in the regions in which the Project Partners operate.

Here below some significant aggregate data (2018):

- SMEs: 16.000 units (apx)
- Turnover: 18.000 million Euros (apx)
- Direct Employment: 230.000 units (apx)
- Exports: 11.000 million Euros.

Actually, these data are restricted to the specific T/C value chain (fibre, yarn, fabric, finishing and final product), therefore the multiplier economic impact of the sector is much higher just considering also adjacent sectors such as: trade and marketing (retailers, wholesalers, distributors, importers, exporters, agents, advertising agencies, specialized exhibitions and fairs, etc); logistics: shipping agencies, transport, etc.; suppliers of machinery, technology, spare parts, raw materials, utilities; suppliers of professional services: technicians, consultants, designers, etc.

In all regions, the T/C sector has been developing since long (in some regions since many centuries) therefore, they are well rooted in the local society and each of them have specific features. Understanding their own characterization can facilitate the identification of initiatives that can trigger new alliances.

Distinctive features of the T/C sector in each region (summary):

- Catalunya (Spain): fashion for all, R&D innovation in materials, green economy
- Tuscany (Italy): fashion niche specialists, sustainability, recycling/regeneration
- Central Macedonia (Gr): industrial service providers, cotton innovation
- Central Tunisia (Tunisia): productivity in clothing, fostering innovation in production
- Technical Textile Tunisia: technical clothing such as protection, enhanced natural fibres
- Alexandria Gov.te (Egypt): development of cotton, manufacturing
- Amman Gov.te (Jordan): high productivity in manufacturing, USA specialists.
- Palestine (whole country): business adaptation to dire situation.

Beside the distinctive feature and competences that each region has, there are many other aspects that are shared or put in common since the T/C supply chain utilize the same inputs, share same machinery and operational know-how. Exchange of materials, products, technologies, skills among different regions are very common, cooperation is a habit together with competition.

The following SWOT Analysis has been drafted for the whole project area and taking into consideration and combining the characterizations of each area.

The SWOT Analysis for each region were conducted locally by the PP on the basis of the their deep and long standing knowledge of their T/C sector, on field interviews to local experts and stakeholders as well as by processing local and national data and information (desk research).

The following SWOT Analysis for the whole Project Area was drafted by Project the Technical Assistance Manager.

SWOT ANALYSIS OF THE T/C INDUSTRY OF THE PROJECT AREA.

| STRENGTHS | WEAKNESSES |
|--|---|
| <ul style="list-style-type: none"> • Full coverage of the whole T/C value chain. • Internationalization • Many and diversified excellences: <ul style="list-style-type: none"> ○ Cotton production (Egypt, Greece) ○ Fashion Brands (Spain, Italy, locally Greece and Tunisia) ○ Skills in Modest fashion (MPC) ○ Manufacturing (clothing/knitting: Jordan, Tunisia, Palestine, Egypt, Greece ... niches for Spain and Italy) ○ Finishing (Italy, Spain) ○ Technical Textiles (Spain, Tunisia) ○ Retail (Spain and locally Greece, Tunisia) ○ Sustainability (Italy, Spain) ○ Technical Innovation (Spain, Italy) | <ul style="list-style-type: none"> • Conflicting interests among SMEs of the area (either vertical and horizontal) • Weak production of advanced fibres • Weak R&D (compared to North EU and other advanced countries) on Technical Textiles and materials • Average small size of enterprises • Still widespread subcontracting (dependence to customers) • Lack of a common (identical) agreement of each country with EU (Commercial barriers) |
| OPPORTUNITIES | THREATS |
| <ul style="list-style-type: none"> ➤ A global re-balancing of cost-competitiveness with Asian countries ➤ Economic development of nearby areas (Africa) ➤ A new wave of “Islamic fashion” ➤ Possible cooperation and integration among Mediterranean partners (Alliances). | <ul style="list-style-type: none"> • Instability of the Middle East • The asymmetric competitive position of Turkey in Europe. • The huge Economic impact of Covid-19 in European Mediterranean countries such as Italy and Spain. • The global slowdown of consumers demand in the short-medium term. |

The SWOT Analysis identifies different areas of possible cooperation among the regions where the opportunities are significant. In these areas, alliances are likely to be possible. However, we have to consider that, at present and despite the long-standing business relationships among SMEs and BROs of the project area, the number of structured alliances complying with the definition criteria of the Programme is zero. Therefore, the way for alliances is possible but not ensured.

PART 2.

BASE LINES OF EACH REGION/COUNTRY.

TEXFOR: Project Beneficiary

Region/Country: Catalonia (Sabadell)/Spain

1. OUTLINE OF THE T/C SECTOR IN THE REGION

a) Size

1. **Geographical perimeter of the sector** (area covered and population): Catalonia is one of the 17 autonomous communities in Spain. Its capital is Barcelona and the area covered is about 31.895 km². Catalonia has a population of 7.619.494 inhabitants (Jan 2019 data) and it represents the 16,2% of the population in Spain.
2. **Number of enterprises** in the T/C Industry (2018): 2.526 companies (30% of the Spanish TC industry).
3. **Total turnover of T/C Industry** (2018): 4.425 mil € (Corresponding to 41% of the Spanish TC industry).
4. **Total local employment direct T/C industry** (2018): 41.165 people (31% of the Spanish TC industry).
5. **Estimation of Total indirect employment** (providing material inputs or services to the T/C industry such as: logistics, software, design, chemicals, packaging and hangers, consultants, technicians, etc.): 4.528,15 people (33% of the direct employment)
6. **Exports:** Total 4.891 mil € (30% of the Spanish TC industry – year 2018): EU: 56%. Others relevant (28%) to the Mediterranean area (Morocco, Algeria, Tunisia, Libya, Egypt, Turkey, Israel, Jordan, Lebanon and Syria)

b) Specialization

1. Core activity of the sector (characterization)

60% of this sector's activity is related to the textiles and 40% to the clothing sector.

45% of the textile products are for the clothing industry, 28% for the home textiles market and a 27% of technical textiles.

Most of the companies are family SMEs, out of which 97% are micro and small companies and 3% are big companies.

2. Typical or prevailing products

The textile sector is compound by companies in the following categories:

- Fibre preparation
- Spinning
- Weaving
- Finishing

Catalonia is strong in manufacturing fabrics and yarns. These companies have high tech processes and a great innovation in the product or the process. The companies have strengthened its competitive factors. They have a high international presence and are investing strongly in sustainability.

3. **Other relevant products**

In recent years the technical textiles have increased their importance.

4. **Prevailing technology/production processes**

The wool production processes have dramatically decreased.

The cotton or silk processes are the main ones.

The knitting production also has an important role inside the sector.

5. **Distinctive skills and/or competences of the cluster**

- Renewed traditional sector
- High international presence
- Recent improvements in its competitiveness thanks to:
 - Innovation (design and materials)
 - Better service (quick response, flexibility and adaptation capacity)
 - Adequate prices (lower production prices and more productivity)
 - Improvement in the training
 - Integrated supply chain
 - Sustainability (social and environment)

6. **Driving force of the sector**

The most dynamic exporters that supply their products and services worldwide represent the driving force of the sector.

2. **HISTORY/EVOLUTION OF THE SECTOR.**

Driving forces of the past and subsequent evolution and changes

The textile sector was one of the industrialization bases in the XIX century in Spain, located mainly in Catalonia and Valencia, and had a prevailing role until the 50's. In 1960 20% of the industrial labour force was in the textile sector.

In the 60's there was a structural diversification in the Spanish industry due to the economic development, the sector started losing importance in front of other growing sectors (chemistry, food, metal, automotive, etc.). In 1985 the textile labour force represented 13% of the industry employment. The entrance to the EU in 1986 represented a historical change, the sector oriented to the domestic market started to coexist with the international competitors. The companies started the export effort to compensate its loss of domestic market share. This effort was not significant until 1992, the crisis after the Barcelona Olympic Games. From 1992-2000 is the period of the international expansion. The exports were increasing 16% per year and for the first time they reached the volume of 5000 million of exports.

The entrance in the XXI century represented some more important changes, the consolidation in the international markets of the sector. The causes are well known: the industrial power of China, cheaper freight costs, irruption of the TIC, etc. The trade policy in Europe provoked an industrial reconversion of the sector. Due to these factors since 2000 we suffered a high increase of the import but the export effort has been higher, consequently the deficit in trade balance has been reduced. The Asian imports have been prevailing since 2005, they represent almost 50% of our total imports. Before our main supplier was the EU. China is our main supplier (23% of the total).

Current situation.

Nowadays Catalonia has a smaller sector with less companies but more competition. They have the capacity to be present in the international markets and are more interconnected.

The actual companies stand out in factors like design, logistics, quick response to the market changes, innovation (technological and not material), sustainability and global concept.

There is a new model of companies, global in production and sales.

| CATALONIA | 2014 | 2015 | 2016 | 2017 | 2018 |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| Companies (units) | 2.444 | 2.343 | 2.341 | 2.376 | 2.526 |
| Employment (units) | 39.588 | 40.152 | 40.646 | 40.985 | 41.165 |
| Turnover (mil. €) | 3.897 | 4.183 | 4.271 | 4.420 | 4.425 |
| Imports (mil. €) | 6.062 | 6.886 | 7.242 | 7.495 | 7.530 |
| Exports (mil. €) | 4.659 | 4.801 | 4.614 | 4.874 | 4.891 |

3. SWOT ANALYSIS

| Strengths | Weakness |
|--|--|
| <ul style="list-style-type: none"> • Innovation & design (technological and not material) • Ample vision concerning markets, niches, segments (fashion, casual, functional, technical, etc.) • Important industrial capacity • Improved training and more professionals in the sector • More integrated supply chain (ex. Spinners or weavers with the final consumer) • Sustainability awareness • Flexibility and adaptability • International recognition | <ul style="list-style-type: none"> • Investment capacity of sector SMEs. High threshold for innovation (financial and know how barriers) • High structural costs of Spain. • Not all links of the supply chain are fully connected (ex. Weavers with the clothing manufacturer) • Low entrepreneurship in the textile sector. (more in the clothing). |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • A new generation of products originating from innovation and R&D as a combination of “style and performance” • The worldwide Spanish image in the segment “fashion for all” • Image of EU company associated to quality, added value, CSR, etc. • Increase in the middle class of developing markets • Strengthen cooperation with neighbouring countries • Industry 4.0 and digitization • Sustainability, circular economy, km zero consumption • Social Development of the value chain | <ul style="list-style-type: none"> • The global goodwill of Spanish big brands (Zara, Mango, etc.) benefits foreign low cost competitors rather than Catalonian firms • Additional structural costs due to austerity policies (taxes, cost of utilities and infrastructures, etc.) • Decrease in demand of traditional markets • Unfair competition from third countries. • Structural evolution of the fashion business • Decrease of the Fashion Consumption • Global protectionism |

4. CHARACTERIZATION

Distinctive Features

- The “niche” specialists (functional products, applications, etc.)
- Performance with Style
- On the way to consolidate a global vision approach
- Strong supporting system for Technical/Product Innovation/Circular Economy.

K question

Looking (creating) market niches or segments where the success factor is “sustainable and technical performance with style/design”.

Catalonia Needs

- Industry 4.0 and digitization
- Circular Economy and sustainability: waste management, clean energy, circular economy
- Training and talent attraction
- Technical improvements: innovation in materials, finishing processes, design of final products.
- Cooperation with partners (suppliers) that are able to provide competences and skills for innovation and design beside production capacities (Co-contracting for innovation)
- Share costs for better services (i.e.: decentralized warehouses).

Catalonia Offers

- Structured support/research/innovation facilities (R&D centres, training, education)
- Entrepreneurship growing “international” and willing to compete globally
- A breed of new entrepreneurs mentally oriented to innovation and used to operating in a difficult business environment.

5. PERSPECTIVES

The Catalonian T/C sector is one of the oldest in Europe and one of the strongest.

“Traditionally, the sector’s core activities are the spinning and weaving segments representing more than the 60% of the Catalonian production of this value chain, the rest of the production is for circular knitting and clothing/apparel. Similarly to all other European T/C sectors, the Catalonian sector has been suffering a long and painful period of restructuring following the complete liberalization of the T/C sector (lifting of quotas) and the globalization of the markets (entry of China into the WTO).

The industrial restructuring heavily impacted on the size and on features of the sector.

The final outcome can be summarized as follows:

- A drastic downsizing of the sector
- A general reorientation and market repositioning of the enterprises
- A disrupting/redesigning of the sector’s values chain as well as of the linkages among its SMEs.

Downsizing of the sector.

In terms of installed production capacity, employment, quantity produced it can be estimated that the sector is approximately one third/one fourth of the size it was in 1990. Conversely, the total turnover of the sector did not decline as much. Today the sector is a mix of activities throughout the value chain. Some of them that are still present in Catalonia such as the weaving/finishing phases (spinning is significantly reduced) while the clothing manufacturing has been partially delocalized and/or outsourced internationally.

The sector “thinks internationally” both in terms of inputs and outputs.

Therefore, the entrepreneurial “mind” of the sector still remains in Catalonia while the “standard” manufacturing (lower added value) disappeared or emigrated. On the other hand, the production of higher value and/or productivity remains active.

It is to underline that throughout this process of Sector reshaping, companies constantly improved the quality of their products and their services. Concurrently also the average quality of the management and entrepreneurship have been improving.

General re-orientation of the offer and market positioning of local SMEs.

Companies that survived were able to re-think their offer by changing their market mix as well as upgrading their product mix. They tried to maintain their turnover by searching for new selling opportunities in the international markets. Actually, exports have been steadily increasing in the past years despite the dire financial conditions in which they operate. Exports figures provide a positive signal about the vitality and entrepreneurship of the sector. Therefore:

1. The previous crisis of the sector (liberalization, globalization) taught companies how to survive:
 - a. Without “local manufacturing”
 - b. In a “asymmetric” environment (where non-European competitors take advantage of cost, social, custom and legislative conditions which are much more favourable) ,
 - c. By emphasizing specialization,
2. The financial crisis taught them how to develop without finance.

It is to mention that, so far, exports are less profitable than domestic sales (higher selling costs) and that the effort for internationalization has been conducted with meagre financial resources. Therefore adopted tools for boosting exports were very basic and traditional: personal contacts and visits and product customization. The positive side of the commercial efforts to satisfy foreign customers’ needs is that it fuelled companies’ specialization and, finally, it fostered diversifies “niche strategies”.

Currently, the market mix as well as the product mix of the sector is much larger and richer and this requires a continuous upgrading of design, organization, marketing, technology and technical skills. The sector is endowed with several players who can provide substantial support to innovation, digitization, sustainability. Generally, in Catalonia, Innovation centres are involved in many sectors and application, generating opportunities for cross fertilization and “lateral” innovation. Also, some other actors recently appeared to support companies in its circularity and digitization.

The continuous industrial downsizing caused a process of aging/obsolescence of technicians and finally a possible impoverishment of the technical skills. The threat of a technical decline is very dangerous considering that products’ performances are a critical factor for the repositioning of Catalanian companies. In order to avoid the decline, the sector re-launched the vocational training. Higher technical education (textile engineering) is still in the curricula of Terrassa University.

The large and successful Spanish retailers such as Inditex (main brand: Zara), Punto FA (Main brand: Mango), Desigual, etc. did not play a particular role in the described sector’s evolution.

These companies, which brought Spain to gain a worldwide leadership in the large segment “fashion for all”, have only marginal links with the sector even when their headquarters are located in Catalonia (as in the case of Mango). Actually, these groups outsource and/or subcontract at global level and Catalonia is still too expensive for low cost/low added value items. In fact, only 15% of Zara products are made in the Iberian Peninsula and mainly in the regions of Galicia (E) and Minho (PT). Additionally, suppliers of Inditex and Mango are ‘compelled’ to re-design their business model in order to fit to the service requirements of these giants leaving very little room for individual strategies (business models with low or very low entrepreneurship).

Fashion is still an important issue. However, many local companies try to find different segments and markets since other European locations still preserve some advantages in the fashion business: (Paris, Milan and London in particular). Furthermore, Innovation based only on design/style appears to be not very defendable since design and style are easily copied or counterfeited and any effort of design/style innovation is quickly overridden.

For its morphology, its cost structure and its location (keeping in mind that Barcelona is anyway one of the leading cities in Europe regarding creativity, innovation and modernity), the Catalonian sector is better shaped for targeting medium/upper level segments, requiring creative/innovative products that combine design and technical performances.

The Catalonian sector is evolving in order to be highly competitive for small lots, customization, quick delivery, and product innovation and sustainability. All these competitive factors in a renewed commercial aggressiveness find the operational tool to penetrate international markets.

Time and quick delivery, particularly in small quantities, is a factor that can provide significant competitive advantages. Some companies are thinking to re-introduce a “production to stock”, taking into consideration that the cost of additional working capital (and the commercial risks involved) can be offset by the benefits of additional turnover and/or a better price.

The sector’s business model emphasizes: creativity, technical innovation, service and entrepreneurship. Such a business model has many features similar to a typical “Italian” sector. General ingredients are very similar but with a significant difference: the Italians still thrive on fashion and their image of design/style creators, while the Catalonians combine their products design (form) with technical performance (function).

What are the elements that may prevent this development? (Sector’s needs)

1. The structural costs of energy and raw material
2. The still weak availability of young mid-level young technicians
3. The human and financial resources to access niches at international level
4. The promotional effort for re-positioning the Catalonian sector as specialized “Performance with Style” textiles.
5. Weak development in environmental sustainability

Disrupting/redesigning of the linkages throughout the sector’s values chain.

Currently, the value chain shows the following:

1. Spinning has almost disappeared and there are very few remaining companies producing grey yarn. On the contrary, yarn finishing resisted much better to the crisis. Competitive finishers are present.

2. The production of woven and knitted fabric is still significant. However, companies of the sector compete better in specialized niches (fabric finishing segment included) and find their potential customers also (or mainly) outside the sector boundaries. There is a gap in the local supply chain between fabric producers and final manufacturers.
3. In the search of defendable niches, Technical Textiles gained an increasing weight. Despite being a business quantitatively minor compared to the traditional one, it has a leading cultural role. Technical textiles foster innovation and innovation finds its natural environment in the technical textile.
4. The production of finished products (apparels) has remarkably shrunk, however it still exists for higher quality and services levels.

Catalonia well represents the typical evolution of a historically established T/C sector.

1. The territorial boundaries or continuity of the sector is not a feature when referring to production or manufacturing anymore
2. The physical supply chain of the sector is not a continuous flow but presents gaps since companies in each segment of the supply chain try to specialize, customize and are in search of customers wherever possible.
3. The linkages of the sector (strong linkages among companies are the specific features of a sector) are mainly based on more “cultural” issues and a shared way to express entrepreneurship is one of the strongest.
4. Modern T/C sectors share a common vision, a set of services and activities that support companies to build up their individual strategies in line with that general vision, and finally an entrepreneurial culture that fuels imagination, innovation and the “style and approach” of that sector.

6. KEY TOPICS:

INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

Please outline any relevant action (that is: project, initiative, policy or supporting measures) that are currently supporting SMEs on the above three topics.

Internationalization.

a. ICEX sectorial plan

Sectorial support from ICEX (Spanish Foreign Trade Institute). The activities that has ICEX support are the following:

| ACTIVITY | DATE | PLACE |
|-----------------------------------|-----------|----------|
| FPA Colombiatex 20* | 21-23 Jan | Medellín |
| FPA Première Vision Pluriel 1-20* | 11-13 Feb | Paris |
| FPA Première Vision Pluriel 2-20 | September | Paris |
| FPA Munich Fabric Start 1-20* | 4-6 Feb | Munich |

| | | |
|-------------------------------|-----------|----------|
| FPA Munich Fabric Start 2-20 | 1-3 Sep | Munich |
| FPA London Textile Fair 1-20* | 15-16 Jan | London |
| FPA London Textile Fair 2-20 | 14-15 Jul | London |
| FPA CITEXT 20* | 1-2 Apr | Troyes |
| FPA Performance Days 1-20 | 22-23 Apr | Munich |
| FPA Performance Days 2-20 | November | Munich |
| FPA EXINTEX | 13-16 Oct | Puebla |
| FPA Functional fabric fair | 22-23 Oct | Portland |
| FPA Mare di Moda | 3-5 Nov | Cannes |
| Interfiliere 2-20 | 28-30 Jun | Paris |
| MD Vietnam | TBC | |
| MD EEUU | TBC | |

Note: FPA are trade fairs and MD are direct Missions.

b. Global Textile Agents database

We would like to create a global database of textile agents. This database network is a good opportunity to have a good database updated by each national organization.

c. Digital Trade Missions

We think in reconvertng the traditional trade missions in digital ones. The new technologies can allow not physical meetings between companies and potential clients or agents

d. Digital Job Centre

Digital Platform for employment search between all the countries. We imagine a Textile “LinkedIn” or info-jobs.

Innovation.

- a. Technological marathon with technological centres
- b. Innovation coupons from ACCIO (grants in order to develop innovation in the companies)

Circular Economy.

- a. Industrial Symbiosis by Texbio. Waste analysis from different production units to fix priorities, and test new use to this waste as new raw materials for other activities.
- b. Dissemination Circular Economy by Ecotex. E-learning free course which develops contents to different stakeholders from textile sector. In order to teach deeply knowledge related with Circular Economy, CSR, Environmental performance, etc.
- c. Circular Economy School Project to promote from childhood knowledge about circular economy principles by close the loop real project with old clothes to create new circular economy products.

d. Participation in different events to explain Circular Economy for different stakeholders.

7. INTERNATIONAL ALLIANCES.

No international alliance complying with the requirements of the ENICBCMED programme is actually existing.

Confindustria Toscana Nord (CTN) - Project Partner 1

Region/Country: Toscana (Prato)/Italy

1. OUTLINE OF THE SECTOR

A) SIZE

- 1. Geographical perimeter** of the sector (area covered and population): The Textile and Clothing sector of Prato is located in the north of Tuscany and is encompassed by the boundaries of the province of Prato to which have to be added the neighbouring municipalities of Calenzano and Campi Bisenzio in the province of Florence and those of Agliana, Montale and Quarrata in the province of Pistoia. The sector spreads over an area of 560 squared Km and its total population is 367,000.
- 2. Number of enterprises** in the T/C Industry (latest figures): **6.287**
- 3. Total turnover of T/C Industry** (latest figures): 7.500 million euro
- 4. Total local employment direct T/C industry** (latest figures): **39.584**
- 5. Estimation of Total indirect employment** (providing material inputs or services to the t/c industry such as: logistics, software, design, chemicals, packaging and hangers, consultants, technicians): 60.000
- 1. Exports:** Total 2.623 million euro, Europe 76%; Asia 13% (of which Hong Kong and China 6%). America 8%.

B) SPECIALIZATION

1. Core activity of the sector (characterization):

Prato is the largest textile industrial district of Europe and one the most important sourcing places for the leading firms of the fashion business. A prominent and historical feature of Prato is its success on international markets.

For more information see below: g) History/Evolution of the sector

2. Typical or prevailing products:

Prevailing products (50%) are woven and knitted fabrics for apparel industry from wool and other natural and synthetic fibres.

3. Other relevant products:

- Apparel and knitwear (25%)
- Yarns for weaving and knitwear (15%)
- Special fabrics (fur, bonded, technical, pile....) for apparel, upholstery and footwear industries, carpets and nonwoven fabrics (10%).

4. Prevailing technology/production processes

Weaving, dyeing and finishing.

5. Other relevant technologies/processes present in the sector

Spinning, twisting, reeling, knitting.

6. Distinctive skills and/or competences of the sector:

- the ability to offer constant creativity and fast reaction times to the requirements of the market
- the capacity to propose top-quality articles with a high fashion content
- strong entrepreneurial resources
- an integrated textile chain with, in every stage of the entire textile cycle, hundreds of small-medium specialized companies:
- strong internal competition tempered with spread cooperative attitudes
- high level of trust that help to create informal but strong business networks and cut transaction costs
- the know-how and facilities in carded wool processing
- the natural and historical propensity for a green production, through reuse and sustainability

7. Driving force of the sector:

Its size as a system and its internal organization which results in the capacity of combining the advantages of industrial production (efficiency, reliability) with the advantages of the craftsman's small **trade**.

2. HISTORY/EVOLUTION OF THE SECTOR

Driving forces of the past.

Prato began to specialize in wool textiles in the Middle Age but, of course, industrial activities got under way at the end of the 19th century. The industrial take-off was pushed by distinctive competencies held in carded wool processing fuelled by the cost advantage granted by producing recovered wool obtained from shredding old clothes and industrial scraps. Up to World War II the Prato textile industry was divided in two production circuits: one based on large vertically integrated companies with generally low-level standard productions (rugs, military blankets, etc.) made for export to the poorer markets (Africa, India, etc.); the other based on groups of firms carrying out subcontract work for the production of articles designed for the clothing markets.

Between the post-war period and the early 1950s, the outlets towards low-level standard production markets (India, Africa, etc.) rapidly disappeared, and the large vertically-organized companies quickly dissolved. The production system underwent a rapid evolution, and the result was an original form of organization largely based on the widespread distribution of work among small-scale enterprises (the so-called "industrial district"). The two dynamic

factors of the new system were: (a) the subcontracting firms, which carried out the actual production, and (b) the front-end firms, which were involved in product design, work organization and sales.

The district-based model was especially in line with the new profile assumed by the marketplace. The main business was still processing carded wool from recycled materials; however, a crucial innovation made carded wool more competitive and more suitable for the clothing industry's requirements for lighter fabrics: the introduction of nylon, which could be spun into yarns having a much finer count and could be interwoven with wool as "backing". This innovation helped to consolidate Prato's position in its market segment (adding a wider range of patterns, colours, effects, etc.) and fuelled a rapid development that found fertile ground in the district in terms of: expertise, propensity for entrepreneurial risk-taking, availability of capital (also thanks to the local bank), a common language and a high degree of cooperation and mutual trust between all the parties involved.

Subsequent evolution and changes

The Prato district became thoroughly established during the 1970s. The emerging of fashion as a mass phenomenon, together with the higher salaries and the revolution in customs, marked a historical division in the clothing market (and not only), and the demand became more fragmented, differentiated, unsteady and seasonal. These variables disrupted the production and distribution chain forcing the structures to become more flexible, responsive and agile. The district was spurred to develop a "structural coupling" that resulted in its making a great leap forward — a surprising feat at a time when textile industries were in decline throughout Europe and in non-district Italy (and with other national districts showing a poor performance). During that period the Prato district underwent a fundamental transformation, from a product-oriented, wool-processing district to a market-oriented, fashion/textile district. The re-orientation of its competitive identity in terms of "satisfied needs" cleared the way for a considerable increase in the variety of products and production technologies. During the seventies and the eighties new possibilities were explored and developed, often with a pioneering spirit, in textiles (patterned combed yarns for knitwear, knitted fabrics, furs, coated fabrics, flock fabrics, etc.). Since then, the fashion world (the world leaders in prêt-a-porter, the garment-makers for industrial brands, the large industrial retailers) would turn to Prato to find what other textile districts could not provide: constantly renewed collections of great variety and creativity and the ability to answer increasingly complex service requests. Even though the second half of the 1980s proved a difficult period (the district was forced to dispose of the excess of investments in carded wool made during the previous decades, since the market for those products was rapidly dwindling.) the crisis would be absorbed by the local system in the 1990s thanks to a further shift towards productions of greater added value and to a further differentiation of supply (e.g. fleece, chenille, etc.). The rebalance of the exchange rate of the Italian currency and the favorable international outlook (especially from 1993 onwards) prompted the district to invest heavily in production facilities, particularly in the finishing process, which became one of the most important sectors of the local production chain, with companies of above-average dimensions.

A comparison between 1991 and 2001 census data shows the importance that the textile industry continued to have in Prato's economy while in the rest of Italy the trend was sensibly worse.

Current situation

At the beginning of the new century this state of affairs was deeply altered by a combination of effects. The major and structural factor of change has been the increasing international integration of emerging economies, mainly China, India, Turkey, with strong manufacturing capacities (not only in textiles!) and lower factor costs (also thanks to "illegal and/or asymmetric" competition).

During the first decade of the new century Prato's textile industry underwent a serious downsizing losing that part of its output addressed to the medium-low end of the market but keeping its strength in the higher value-added production. Of course, Prato suffered also the 2007-2009 recession and the downturn that has been concerning the domestic market since the second half of 2011.

However, looking at the structural aspects, the wealth of expertise and organizational skills that Prato's has developed over the years seem hardly assailable by the new competitors.

Especially:

- the ability to offer constant creativity and fast reaction times to the requirements of the market seem consistent with the end markets, that need to be continuously stimulated, and with a supply chain that needs to cut the interval from design to production, with a view, among other things, to minimizing the risks of unsold goods
- the capacity to propose top-quality articles with a high fashion content appears consistent with the demands of market segments that seem to be progressively growing (leaving aside the cycles and nervousness caused by the fluctuations of economic trends)
- the know-how and facilities in carded wool processing accumulated over the years do not seem vulnerable to the new competitors, given their modest importance in the global fibre-processing sector (in general, wool represents 3% of global fibre production).
- The constant pursuit of environmental sustainability, such as the attention to the water's cycle in production, the EMAS (EU Eco-Management and Audit Scheme) certification for industrial districts, the Detox commitment and Consorzio Italiano Detox (CID) and Recycled textile materials, the traceability and international certifications (GRS), the eco-design and the project for unsold and used clothes

3. SWOT ANALYSIS

| Strengths | Weaknesses |
|---|--|
| <ul style="list-style-type: none"> • Entrepreneurship with high competence and creativity in product development (fashion) • Rich diversification of specializations, business models, products • Technical specialization in the dyeing and finishing stages • Ability to offer top-quality articles with a high fashion content • Unique know-how and facilities in carded wool processing. | <ul style="list-style-type: none"> • High structural costs: labour, energy, tax, administration • Cultural inability of enterprises to become big (individualism, family business, focus on niches and top end specializations). • External Structural limits to business growth: labour code, rigid regulations, etc. • Weakened textile chain especially in some segments like spinning and weaving • Ageing entrepreneurs and ageing technicians |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Renewed attention to quality by int.l fashion brands and leading independent retailers and refocus of EU large buyers to neighbouring areas which can offer “total value for money”, (design, products, services) • Growing market for guaranteed, certificated or “green” goods and production processes, where Prato production is already committed to the realization of sustainable standards | <ul style="list-style-type: none"> • Oligopolisation of Retail (Luxury chains, Low cost fashion, private labels). • Decreasing social value of “fashion” and reduction of the fashion medium/upper segment. • Low demand in Europe |

4. CHARACTERIZATION

Distinctive Features

- Fashion
- Dyeing, finishing (wet), yarns (melange), fabrics (texture)
- Diversification of business models/products
- Technical Innovation
- Water management
- Only Small and micro companies
- Typical product based on reuse

K Issue:

Targeting or creating market niches or segments where “fashion innovation” and “technical innovation” can pay to the structural costs of the sector (productivity and structural/external costs reduction)

Toscana Needs:

- Find new market niches, primarily as inputs for the fashion sector but also in technical textiles and clothing.
- Rejuvenate the sector by starting from HR (technicians and entrepreneurs)
- Market (and make the most) from the innovative assets already available in the sector

Toscana Offers:

- High competence in a wide range of technologies and production processes
- Facilities and structures/processes for innovation (technical, design, testing, prototyping, ...)
- Skilled (and still vital) entrepreneurship (risk taking)
- Links with other leading North Italian T/C sectors as well as the European markets/buyers.
- Typical production based on reuse, system orientation towards sustainable production process

5. PERSPECTIVES.

The on-site mission confirmed the industry situation as described in the Data Collection document and in the SWOT analysis done by CTN (above “Characterization of the Sector). Nevertheless, meetings with several sector’s key players and additional in-depth considerations with CTN officers, provided significant added value for the overall comprehension of the local T/C industry and the challenges that the sector has to cope with in the next future.

In brief the findings:

1. Despite that Prato’s identity is founded on “carded wool fabrics”, today the sector presents a very high “business diversity” (a “biodiversity” as figure of speech) either along the value chain (from yarn preparation to clothing manufacturing) either in the array of products (fashion, technical textiles, home). Currently, the “carded wool fabric” business is relatively minor. Conversely, activities related to dyeing and finishing (yarns, fabrics and final garments) play a remarkable role. Bio-diversity (or polymorphism) has two main features: on one hand it makes the sector less “efficient” due to the intrinsic “entropy” of the system; on the other, it makes it more “resilient” that is able to resist to external shocks.
2. Due to the subsequent crisis of the latest 10/15 years (global competition, decrease of demand, financial crisis in Italy), the sector underwent a significant modification in its morphology. It shrunk in size and became more fragmented (the size of the “average enterprise” became further smaller). We can define the Prato T/C cluster as a “molecular aggregation of enterprises” or MSEs (Micro and Small Enterprises. Indeed, companies with more than 100 employees are considered as “big”). The molecularization of the sector is consistent to its competitive position which is:
 - a. Fashion
 - b. Small Lots
 - c. Quick Response

Or, to sum up, Prato is a sector “biologically fit for fashion”.

3. “Fit for fashion” means immediate adaptation to customers’ requests. This is possible only if production and technologies are flexible/adaptable. Small lots and quick response require technologies which are elastic (that is: able to manage large and small quantities) and flexible (changes/shifts). In some cases, “elasticity” is obtained by “modularity” (example: looms); in others it is provided by advanced technology (spinning, dyeing) which hardly can be afforded today by micro or small companies of thin financial margins.
4. The need to be always “attractive” for the fashion industry multiplies the offer of samples and collections. As a consequence, stocks (leftovers) are often significant. This has negative effects either from a financial standpoint (the cost of working capital) as well as an operational one (space in warehouses). Generally, the intrinsic quality of the unsold items is very good and they could be fruitfully used for clothing elsewhere than seasonal fashion.
5. The severe downsizing of the sector greatly reduced the flow of investments in technology as well as in human resources. Plants are becoming obsolete and the park of human resource is getting rather old. Despite the dire environmental circumstances, a general rejuvenation of the sector is slowly under way in all areas: machinery, equipment, technicians and entrepreneurs.
6. The need of quick response is facilitated by “Buy” instead of “Make”. The outsourcing of inputs, previously made in Prato (in particular for raw yarns and fabrics) is impacting on the balance of cooperative-competitive relationships among SMEs. The historical mix of cooperation and competition, which has always been one of the key and unique features of the sector, is to be adjusted to the current global standard of the T/C and fashion business.
7. Differently to many other T/C European sectors, Prato did not internationalize its production. There are only rare cases of delocalization or international subcontracting. The international dimension of the sector resides on the selling side (exports) and, partially, in the sourcing of imported semi-finished or intermediate-products.
Prato is still “very Italian” in terms of production.
8. The sector is very “structured”. In time, many supporting bodies and organizations sprang and grew beside the T/C industry. Indeed, the sector is endowed with many “sector assets”, that are widely recognized and reputed even at national or continental level. The most well-known are “Tecnotessile” (R&D, Innovation, technical textiles); Gida and Progetto Acqua (water treatment/recycling); Other active organizations are: PratoFutura (economic and social lab); Prato Export Consortia, the Textile Museum, Centro per l’impiego - FIL (the local job Placement/Re-placement agency), the Chamber of Commerce, the Municipality (that ever is a key player in the economic development of Prato). This massive presence of service providers brings has many positive outcomes (coordination, synergies, wide array of supports) but may presents some drawbacks:
 - a. The coordination effort is complex.
 - b. Sometimes the real (positive) impact of supporting bodies on the T/C business is not clear or visible in the short term.

9. Among the organizations that characterize Prato some are to mention for the particular interest they may have in the TexMed Sector project:

1. Tecnotessile, R&D, Innovation, technical textiles
2. Gida, Water treatment and recycling
3. Polo Universitario, Istituto Buzzi, Centro per l'Impiego FIL and Prato Futura (all involved in HR and competence development).

9.1 Tecnotessile is an “excellence centre for innovation” at national/European level. It is based in Prato but its horizon is by far beyond the boundaries of the sector. Enterprises of Prato, which should primarily benefit from its location, must be active to grasping the innovation locally created. It appears that Tecnotessile is able to produce more innovation than the sector is able to absorb. Part of the “innovative outcomes” (new products, new applications, new patents ...) remain idle because there is a gap in the ability to transform them into “business”. This is due to many causes such as:

- a) the “risky” nature of all innovation (general cause)
- b) the unavoidable asymmetry in knowledge between innovators, enterprises and final users (consumers)- (general cause)
- c) the inconsistency between the size of the companies of the sector and the resources needed for making the innovation a business (specific cause).

So far, the focus of R&D centres (Tecnotessile among them) has been the “production” of innovation; now efforts are to be done to foster the spreading out, the “marketing” of innovation to be able to exploit the assets and opportunities for innovation that are “in the drawer”.

9.2 Gida has a long experience (over 30 years) on water treatment and recycling for both industrial and urban water waste. It is considered a historic case of best- practice at European level. Yearly, about 4 million m³ of treated water are recycled into the industrial plants. The recycled water is distributed through a network of pipelines of 64 km.

9.3 Prato has to face all kinds of problems concerning human resources:

- Unemployment, re-qualification and replacement.
- Loss of technical expertise and the difficult generation of young technicians.
- Generational change for entrepreneurs.
- Upgrading competences on new technologies.
- Integration of foreign workforce (immigrants).

The widespread effort for rejuvenation/upgrading of the workforce, the technicians, the management and the entrepreneurs is a key issue.

10. Finally, it is to mention that in Prato there are two sectors:

- a. the Italian sector (on which we have been focusing so far)

- b. the “Chinese” sector which counts thousands of SMEs and about 30.000 inhabitants.

The Chinese sector is specialized in the “pronto moda” segment. It is composed of SMEs of Chinese ownership/management producing Low Cost clothing (mainly for ladies and kids). Products are labelled “made in Italy”, manufactured by Chinese workforce and sold in all Europe. The business is huge (about 2,5-3 billion Euros). All figures are estimations because of the significant informal nature of the sector.

Very limited are the business contacts or links between the two sectors. They share a number of services (professional services) or infrastructures (logistics) but nothing more. It is nevertheless obvious that the mere physical vicinity generates common interests and, sooner or later, the links between the two sectors will increase. Significant steps have been made in the field of education (Corso Cedic a specialized training course on China culture and business).

11. To summarize, the Prato T/C sector is: specially “fit for fashion”, “molecular” (small units), “bio-diverse” or “polymorphic” (diversified business), “plastic” (easily adaptable), excellent in “dying/finishing”, in a process of rejuvenation, very Italian in manufacturing, well-structured. Finally, it is also “dual”: Italian and Chinese; and the Chinese part is totally separated (as a business) from the Italian one.

6. KEY TOPICS:

INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

1. *Prato is born sustainable.*

From the 12th century a new technique for regenerating fibres was introduced in the textile process. The old woollen textile fibres were processed in order create new fabrics. Since then, Prato has been known throughout the world for the production of carded wool, although new products have been introduced with textile developments since the 1960s and 1970s: yarns for knitwear, synthetic leather, synthetic fur, furnishing fabrics, nonwoven fabrics, technical fabrics and knitwear. The amount of textile materials that the Prato district regenerates amounts to 143,000 tons, equal to 15% of the total quantity of regenerated textile materials.

- The main contributions to environmental sustainability of *cardato rigenerato* are that these fibres have already been treated and don’t need a great part of textile processing: especially washing, preparation for dyeing and dyeing. The result is a drastic reduction in consumption: energy, water, chemicals and dyeing agents.
- Secondly the textile materials are regenerated more and more times, therefore they will not increase waste.
- Lastly, a part of regenerated materials come from Prato, so this minimizes transports with great improvements on environmental impact.

Environmental footprint – LCA results and comparison

| Impact | Unit | Virgin wool | Recycled wool | Reduction (%) |
|-----------------|----------------|--------------------|----------------------|----------------------|
| GWP | Kg CO2-eq | 1,95 E+01 | 9,99 E-01 | 95% |
| Ozone depletion | Kg CFC – 11 eq | 3,69E-07 | 5,49E-08 | 85% |

In order to continue this virtuous process, it is urgent that the end of waste directive for the textile sector is approved in Italy.

The water's cycle

- **Prato has been among the first districts to organize centralized sewage treatment plant** that has guaranteed wastewater treatment for the entire population and for over 300 companies in the area. Today, 45 millions of cubic meter per year is purified through a system of 5 district purifiers, operated by Gida.
- In the 1980s Prato **was equipped with the largest industrial aqueduct for the distribution of purified water in Europe** (over 60 km of network which distributes to companies about 5 ml of recycled water that is used in wet production processes of the district)
- Since 2013 Prato has obtained the **EMAS** (EU Eco-Management and Audit Scheme) certification for industrial districts.

Prato and the choice of Detox commitment and Consorzio Italiano Detox (CID)

In February 2016, for the first time in the world, 20 manufacturing companies of the Prato district and members of Confindustria Toscana Nord, endorsed the **Detox** commitments and acknowledged how important it is to eliminate dangerous substances from the textile production cycle. These Companies represent different parts of the textile supply chain, such as factories producing yarn, fabric and raw materials, dyeing plants, yarn or fabric finishing companies, producers of chemicals for the textile industry. Initially led by Confindustria Toscana Nord, the industries created the Consortium to better manage their common path towards a sustainable fashion.

CID activities aimed at the practical support of all the member companies: surveys and researches, constant support, training course, national and international promotion.

Recycled textile materials in the Detox commitment

In order to support Detox committed companies, CID has promoted an investigation regarding chemical contamination of regenerated articles and has developed a PRSL (Product Restricted Substances List) proposal for these materials. This work is complemented by the design of operational tools for the qualification and traceability of the recycled textile material production line, also through collaborations with international certification authority.

Traceability and international certifications (GRS)

In the last few years the companies in the district have worked to guarantee international textile products with traceability and re-certification. Today in Prato district the number of **GRS** (Global Recycled Standard) and **RCS** (Recycle Claim Standard) certified entities is 352.

These Companies represent all the recycled textile supply chain:

- 36% Spinning mills
- 23% Regenerated wool manufacturing
- 22% Weaving mills
- 10% Dyeing and finishing mills
- 7% Knitting mills
- 2% Non-woven fabrics and fashion accessories

Eco-design and project for unsold and used clothes

The fashion students must be at the frontline in learning about and producing collections with sustainable raw materials, created without chemicals, without waste, and that can be easily recycled. At the last Pitti Immagine Uomo, CID-Detox together with IED- Istituto Europeo di Design and Greenpeace Italia presented five capsule collections called “The Time is Now!” using sustainable raw materials and used garments. The next step of the project aims to work with Greenpeace and the fashion industry to give a new life for unsold and used clothes and on a new concept of “green market”.

Results of this sustainable evolution in Prato:

- Effective improvement of the presence of toxic substances in water (as evidenced by GIDA's periodic checks)
- Significant improvement in the presence of toxic substances in textiles, fibres, dyes and auxiliaries
- Greater awareness thanks to the scientific researches
- Innovation, New products and new marketing campaigns
- New approach with specific PRSLs for regenerated textiles
- Traceability and international certifications (GRS)
- Enhancement of the regenerated product
- New project for eco-design, green market and new life for unsold and used clothes

2. Matchmaking “TexFIT”

Innovation in textiles and fashion: this is the focus of TexFIT, international brokerage event dedicated to the new technologies for textile and fashion sectors. TexFIT offers companies in textile, footwear, fashion and mechanical textile sectors the opportunity to meet and discuss with international research centres specialized in textiles, both technical and for clothing, to evaluate new products, new technologies and new projects. Through the Matchmaking methodology, an afternoon of bilateral meetings of 20 minutes each, pre-organised, will be structured to evaluate possible collaborations.

Sectors involved:

- Textile for clothing
- Technical textiles
- Fashion & accessories
- Footwear
- Advanced production systems
- Textile machinery
- Logistics

The participant had the opportunity to find business partners, discover new technologies, meets European R&D centres covering all the value chain of Textile and Fashion Innovation

Benefits from this event:

- Publish and showcase products, projects or business needs to event participants
- Initiate and arrange promising pre-scheduled 1:1 meetings at the event
- Generate fresh leads and meet new contacts in a time and cost-efficient way
- Stay one step ahead of the competitors by contacting the more advanced R&D Institutions specialised in each sector

The Top 5 objectives to make companies' stay a success:

- Meet Partners and Customers
- Discover New Products, Technologies & Services
- Prepare Purchases or Projects
- Meet New Suppliers
- Get Information about latest's technologies

Matchmaking is an ideal opportunity to initiate promising contacts in pre-arranged meetings of 20 minutes. On September 23rd 2019, in the Prato branch of CTN, 26 research centres and 40 textile companies attended the matchmaking. CTN could organise a new TEX4IM edition in the framework of TEX MED Alliances.

7. INTERNATIONAL ALLIANCES.

No international alliance complying with the requirements of the ENICBCMED programme is actually existing in Toscana.

Hellenic Fashion Industry Association (SEPEE) - Project Partner 2

Region/Country: Central Macedonia (Thessaloniki)/Greece.

1. OUTLINE OF THE SECTOR.

A) SIZE.

1. Geographical perimeter of the sector (area covered and population):

The geographical perimeter of the sector is central Macedonia (Kentriki Makedonia). Central Macedonia is one of the 13 regions in Greece, located in the north-central part of Greece. The area covers 18.111 km² and has a population of 1.900.000 inhabitants (17.3%) of the total population of Greece, which was 11.000.000. (census 2011).

Thessaloniki is the capital city with a population of 1.100.000 inhabitants.

2. Number of enterprises in the T/C Industry (2018):

- Greece (total) 2.056
- Central Macedonia 928 (44%)

3. Total turnover of T/C Industry (2018):

- Greece (total) 2.036 mil. €
- Central Macedonia 1.010 mil. € (50%)

4. Total local employment direct T/C industry (2018):

- Greece (total) 22.273
- Central Macedonia 10.820 (48%)

5. Estimation of Total indirect employment (providing material inputs or services to the t/c industry such as: logistics, software, design, chemicals, packaging and hangers, consultants, technicians):

| | 2018 | | |
|---------------------|--------------|--------|---------|
| | Others | Trade | Farmers |
| • Greece (total) | 10.00075.000 | 60.000 | 145.000 |
| • Central Macedonia | 5.00018.000 | 20.000 | 43.000 |

6. Exports:

| | 2018 |
|---------------------|-------------------------------------|
| • Greece (total) | 1.468 mil € |
| • Central Macedonia | 1.000 mil. € (69%) of which EU 81%. |

B) SPECIALIZATION.

1. Core activity of the sector (characterization): The core activity model of the sector is export oriented mainly in EU major markets with large and medium clients either retailers or product brands.

2. Typical or prevailing products: knitted apparels from cotton and other mixtures.

3. Other relevant products: cotton yarns, knitted fabrics, dyeing & finishing services and woven apparel.

4. Prevailing technology/production processes: the majority of the companies in the sector are export oriented companies of knitted apparel. They are mainly “service” providers such as specialized co-contractors with manufacturing capacities in neighbouring countries like Bulgaria, FYROM, Albania etc.

5. Other relevant technologies/processes present in the sector: spinning mills, knitting houses, dyeing & finishing houses and apparel brands.

6. Distinctive skills and/or competences of the sector:

- a) The availability of very good quality of cotton in the region
- b) An integrated textile chain from raw materials to the final products
- c) The possibility of delocalization of the garment production in short distance low cost countries (Bulgaria, FYROM, Albania)
- d) Long cooperation with the main European markets
- e) Fast delivery, flexibility, small quantities and custom service
- f) Widespread entrepreneurship

7. Driving force of the sector is the export-oriented companies.

- Export consortia

2. HISTORY/EVOLUTION OF THE SECTOR

Driving forces of the past:

For a long time, the area around Thessaloniki, central Macedonia has been an important textile and clothing region in the European landscape. Its historically relevant position is mainly due to two key factors:

- The availability of local cotton, grown in the surrounding regions of Macedonia, Thessaly and Central Greece for a total acreage of about 300.000 hectares.
- The logistic position of Thessaloniki which remains an important crossroads between the Balkans and the Mediterranean/Middle East countries.

These favourable conditions allowed companies in the region to take full advantage of the expansion of the textile and clothing business during the 70s and the 80s. In that period, companies strengthened significantly their position and became mostly exporters to the European markets. The T/C region around Thessaloniki evolved towards a mature and articulated industrial sector consisting of an

integrated textile chain - cotton specialized - which stretched from raw materials to the final products including: fibre production (ginned cotton), spinning mills (yarns), knitters (fabrics), dyers, finishers, and clothing manufacturers as well as a significant endowment of horizontal services provided by public institutions and private initiatives.

In the early 1990s Thessaloniki was the most important T/C centre in South East Europe, having a lead even on Istanbul which was competing with Thessaloniki in terms of advanced services and activities, know-how and marketing for the sector. The T/C industry in central Macedonia reached its peak at the beginning of the 1990s with approx. 75.000 employees and 5.000 registered companies. The prevailing business model was export oriented mainly to Germany and other European countries, with large clients either wholesalers' importers.

Subsequent evolution and changes:

From then onwards the T/C industry in the region underwent a constant transformation under the combined influences of mounting competition from low-cost producer countries and the new investment opportunities offered by the collapse of communist regimes in neighbouring countries. Greek entrepreneurs, especially small and medium clothing manufacturers, were quick to delocalize labour intensive productions at first in Bulgaria and later in FYROM, Romania and Albania where low-cost labour clothing plants were readily available. This process was particularly noticeable in Southern Bulgaria where Greek entrepreneurs and managers could easily commute from Thessaloniki and other T/C centres. Within few years a sort of T/C specialised area with a strong presence of Greek entrepreneurs developed between the border and the region South of Sofia. Initially, Greek garment producers continued to use Greek-made fabrics for the delocalized clothing units, with a tendency, over time, to replace them partially with imports from Turkey.

The delocalization process was necessary to maintain cost competitiveness especially after the signing of the EU-Turkey Customs Union in 1995. At that time a number of EU programmes were funded to support the Greek T/C sector and many T/C companies invested in a major upgrading of technology with some of them also trying to develop their own brands.

Delocalization boosted competitiveness, thanks to the low costs afforded by low wages in the clothing sector in neighbouring countries, and exports to the mainly EU markets continued to grow reaching a peak of 2,5 billion euro in 2003 (1,5 billion in clothing and 1 billion in textiles). From that time onward, the T/C sector in the region started to decline.

Major declining factors have been:

- The competitiveness of China and other Asian low-cost countries which exerted a strong cost pressure. The pressure was further reinforced especially after 2005 with the quota abolishment.
- The growing importance of Turkey as a T/C powerhouse and of Istanbul as one of the new capitals of the T/C industry.
- The increasing disintegration of the local cotton chain. First, Greek cotton growers received incentives to increase production, but no requirements on maintaining quality standards were applied. Raw and ginned cotton was traded on the spot commodity market instead of supplying the local cotton textile chain directly. Second, strong competition of everybody against everybody reduced margins for all and pushed companies to find customers “anyway and anyhow” therefore weakening the internal links of the area.

- Increasing market competitive pressures, lower margins, and decline of leadership caused a continuous loss of attractiveness for the T/C sector in the Thessaloniki area leading a significant number of SMEs entrepreneurs to reallocate their assets in other businesses such as real estate, photovoltaic, tourism and finance.
- The international financial crisis in 2008 and mainly the domestic economic crisis that erupted in Greece in 2009 struck dramatically the industries of the sector. At first the exporting industries and subsequently (from the end of 2009) the companies that were focused on the domestic market (local brands).

Current situation:

Despite being weakened, Thessaloniki and central Macedonia still remains a major centre of the Greek clothing industry. This area represents more than 48% of total Greek employment and almost 70% of national export of the T/C industry.

The 10-year period (2009-2018) of the economic crisis in Greece had a very dramatic effect on the T/C sector. The consumption and the retail sales went down by more than 50%, the turnover by 48% and the sector lost more than 40% of the work force. During this period Greek brands started focusing in exports. Also due to the difficulties in financing Greek brands moved their production back in Greece replacing a part of their imports from Asia.

In the last 2 years, (2017 – 2018), and the first six months of 2019 the situation improved a lot in exports with an increase of 11,2% in 2017, 12,2% in 2018 and 30% the first half of 2019.

Also, in local market there are signs of improvement with an increase of retail sales and consumption by 2,1% in 2017 and by 0,8% in 2018.

Another very important factor is the increase of branded exports with a much faster percentage than private label exports.

In central Macedonia enterprises are still present -even less- in all segments of the T/C chain from cotton crops to the final products with a significant component in the capital-intensive operations of spinning, knitting and finishing and in advanced services such as design, CAD/CAM, marketing & logistics.

The unstable economic situation in Europe, force many European retailers and brands in manufacturing close to the markets. Greece has the possibility to take advantage of this trend increasing its exports in both directions, branded products and specialized co-contracting.

3 SWOT ANALYSIS

| Strengths | Weaknesses |
|---|--|
| <ul style="list-style-type: none"> • Possibility of delocalization in low-cost manufacturing areas within commuting distance. • Technical competencies along the chain, from cotton fibre to finishing and confection (some marketing) • Widespread entrepreneurship with high commercial orientation • Goodwill in large European markets • Growing specialization in some technical applications (protech) | <ul style="list-style-type: none"> • Dependence on sales agents in Europe • Proximity to Turkey (which can benefit of an asymmetrical competitive edge) • Weakened textile chain • Low attitude of SMEs to act as an integrated system • Aging entrepreneurs and workers • Medium high structural costs in Greece. • Difficult economic and business environment (credit, tax, lack of institutional support) |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Refocus of EU small and medium buyers to nearby areas offering a medium low total cost, logistic pluses and short delivery time. • Growing preference of EU consumer towards guaranteed or certificated goods for safety and sustainability (materials and treatments: dying & finishing) • Economic and political stability • Local market increase | <ul style="list-style-type: none"> • Shrinking demand in Western markets • Unfair competition of illegal imports from low-cost countries • The image of the sector • Difficulties in attracting young people |

4. CHARACTERIZATION

- The T/C business sector with a “high productivity” CMT backyard.
- Very skilled entrepreneurship for assembling and combining a wide array of factors along the supply chain at international level.
- A business culture/approach favourable to specialized co-contracting.
- An increasing number of local brands

K question:

Looking for clients that appreciate a “high level of service” (modern co-contractors) that is: encompassing a mix of abilities in product design, industrialization (flexibility and elasticity), CMT, delivery, smaller quantities etc.

Central Macedonia Needs:

- Strengthen the “quantity and quality” of services offered.
- Accessing new markets and lowering the dependence from agents
- Improve the quality of the cotton fibre (seeds, fibre preparation)

- Improve the ability to “stay on the edge” of applied innovation (digital printing, finishing, ICT technologies)
- Lower costs of energy
- Supporting new entrepreneurship and second/third generations
- Sustain the development of Local/Greek Brands.

Central Macedonia Offers:

- Experience and competences in co-contracting with large & medium European customers
- Significant examples high level of “modern” entrepreneurship both in co-contracting as well as Small and Medium (domestic) Brands often integrated with own retailing
- A significant/good cotton fibre production (crop and ginned cotton)
- Good assets for the support of the T/C value chain: software houses, service centres, vocational training etc.

5. PERSPECTIVES.

After several waves of T/C industry restructuring due to liberalization and globalization (1995-2005), the latest Greek financial crisis (credit crunch and vertical drop of the domestic market) caused additional shake out of companies. In the period 2009-2017 a severe “Darwinian process of selection” occurred in the sector. Actually, still existing companies, which learned how to survive (and even develop) in a particularly difficult economic environment, are stronger than before.

Now the sector is “populated” by companies that show a high (or very high) degree of entrepreneurship and that are better equipped to access the international markets.

Two are the “species” of companies the lead the sector:

1. Small and Medium Brands, with evolved/complex business model (often including the retail phase). An increasing number of these companies have also international operations after having developed in Greece.
2. Co-contractors that offer a wide and customized set of services to leading European fashion brands. These companies perceive themselves as providers of “high level services” to the T/C sector, certainly they do not perceive themselves as simple “clothing manufacturers”. Innovation, flexibility, quality and smaller quantities being the key factors of their strategy.

These two segments have developed outstanding skills in assembling and coordinating different activities. In particular, they excel in managing the relations with their customers (being them big brands or the final consumer) and in the optimization of production (production planning and quality control). Skills on design and modelling are also widespread.

Leading companies do not limit their manufacturing to the surrounding low-cost regions of the Balkans (which are the “de facto” workshops of the sector) but have a global reach for product sourcing which include China and other Asian countries.

Beside these two segments, a third group of manufacturing companies appear in a strong position: the cotton producers/ginners. Unfortunately, starting from late '80, when the share of exported cotton was below 20% of local production, the Greek cotton does not supply the local spinning industry neither Greek companies that manufacture abroad.

The cotton business act independently from the sector.

The Greek cotton is of “high quality among the medium-length staples”.

The last 5 years new efforts have been exerted for improving the seeds and the agriculture part of the production, it is also envisaged that improvements of the technical performances of cotton might be possible in the ginning phase and/or in treatments before the spinning phase. A highly performing cotton (techno-cotton) would be in line with the market demand that goes towards a highly diversified “functionalization” of the products.

High entrepreneurship as well as a high level of technical skills characterize also the entire textile value chain in Central Macedonia, that is including specialized services to the T/C business. In particular, dyers and finishers are catching up with the best practices in Europe (Italy in particular), while some companies have fast adopted and developed digital printing with success.

Other T/C related businesses had to rethink and to revise their strategy; examples are the ITC services that, in order to cope with the drastic fall of the domestic demand, went international and diversified their catalogues in terms of services and software.

In conclusion, the sequence of shocks that have been impacting on the sector since mid 90s had different outcomes:

1. A significant shake out of companies (shrinking/downsizing of the sector), particularly in the mid part of the supply chain (Spinners, knitters and finishers). The selection rewards the best performing enterprises and, ultimately, rises the average entrepreneurial quality of the sector (fewer but better).
2. The transfer of the manufacturing activities outside the geographical perimeter of the sector (in the surrounding areas) making the region of Central Macedonia “sector without local manufacturing”. However, this circumstance has not limited accordingly the total production controlled by Greek companies. The production is not “made in Greece” but the products are “own by Greek” companies. Consequently, drawing conclusions just considering the country statistics is misleading; it is true that the quantities “made in Greece” are much lower than before however it is not true that the turnover generated and controlled by Greek (or Central Macedonian) companies is decreased as much.
3. An evolution of the surviving companies towards more complex business models. That is:
 - a. from subcontractors of large European buyers (private labels) to advanced co-contractors able to sell services and competencies (instead of mere “working capacities”) to leading chains and fashion brands;

- b. from unbranded producers to medium-small brands enterprises able to reach the final consumer, initially in the domestic market and subsequently also the international markets (in this case the SMEs of the Thessaloniki sector are following the example of first movers from Athens).
4. The disruption of the supply chain within the central Macedonia T/C sector (in the sense that there is no continuity in the flows of inputs-outputs from upstream to downstream operations in the sector). This splitting weakens the internal physical linkages but, on the other hand, free SMEs from internal dependence allowing more flexibility and boosting entrepreneurship.
5. The general improvement in managing finance. It can be said that in the latest years the sector learned to survive and develop without credit.

Today the Central Macedonian sector is a mature, evolved and in many ways “advanced” sector where entrepreneurship is strong and keeps the sector vital and still competitive (although shrunk). The local scene is much less gloomy than the quantitative figures say.

However, still many problems and difficulties are present.

Beside those related to the economic and financial situation of Greece and those that affect the whole European T/C industry (imports from low cost countries, illegal imports, counterfeited products, tax pressure, high rigidity in labour) other specific drawbacks have been highlighted:

1. The cost of energy which in Greece (similarly to Italy and Spain) is very high. It causes a structural disadvantage, in particular for dyers, finishers, knitters and spinners.
2. Besides the improvement of the Greek economy the last 2 years the demand from the domestic market is still low and affects a significant number of SME Brands.

The closeness to the Turkish competitor. Indeed, Greek companies are penalized by an asymmetrical situation that gives, even in presence of the same cost structure, unparalleled advantages to Turkish companies.

6. KEY TOPICS: INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY.

SEPEE & TEXTFOR participate in two ERASMUS projects:

1. ECOTEX - www.ecotexerasmus.eu
2. EXTRO SKILLS - www.extroskills.eu

The outputs from both projects is on-line training in sustainability (ECOTEX) and in exports (EXTRO SKILLS) for the Textile & Clothing sector.

The training material will be helpful for the personnel of the companies and students in all countries of our project in the fields of INTERNATIONALIZATION & CIRCULAR ECONOMY.

7. INTERNATIONAL ALLIANCES.

No international alliance complying with the requirements of the ENICBCMED programme is actually existing in Toscana. However, some of the EU funded projects can be considered as “temporary alliances”, in particular: TCBL project www.tcbl.eu is a sustainable alliance in T/C sector in Europe and it could give to us ideas for our project.

Centre Technique du Textile (CETTEX): Project Partner 3.

Region/Country: Central Tunisia (Ben Arous/Monastir) - Tunisia

1 OUTLINE OF THE SECTOR

(THE “STANDARD” TEXTILE/CLOTHING SECTOR IN TUNISIA)

A) Size

1. Geographical perimeter of the T/C region in Tunisia.

Central Tunisia (Monastir, Sousse, and Mahdia) is the most important textile zone in Tunisia, located in the central part of Tunisia. The total population of this area was 1.634.616 inhabitants (14.88%) of the total population of Tunisia, which was 10.982.754. (census 2014 www.ins.tn). However, T/C workshops and SMEs are spread out in many other regions of the country.

2. Number of enterprises in the T/C Industry (2019):

- Tunisia (total) 1.613
 - Central Tunisia 730 (45%)
- (source: Directory of Industrial enterprises APII)

3. Total turnover of T/C Industry (2019):

- Tunisia (total) 2.345,04 M€
 - Central Tunisia 1.055 M€ (45%)
- (source: CETTEX statistics)

4. Total local employment direct T/C industry (2019):

- Tunisia (total) 164.423
 - Central Tunisia 71.100 (43.24%)
- (source: Directory of Industrial enterprises APII)

5. Estimation of Total indirect employment

Trade: sales representatives, product quality control agents, logistics, laboratory analysis,

- Tunisia (total) 59.000
- Central Tunisia 25.000

6. Exports T/C (2019):

- Export Tunisia 2.345 M€
- Central Tunisia 1.055 M€ (45%)
- Tunisian export to EU 94%

B) SPECIALIZATION

1. **Core activity of the sector:** The core activity model of the sector is export oriented mainly in EU major markets with large and medium clients either retailers or product brands.
2. **Typical or prevailing products:** ready-made clothing, sportswear in denim and other fabrics from cotton and other mixtures, workwear, lingerie, swimwear, t-shirts and pullovers.
3. **Other relevant products:** cotton and mixture yarns, knitted fabrics, dyeing & finishing services, non-woven products.
4. **Prevailing technology/production processes:** the majority of companies are export-oriented, we find companies making clothes sportswear in denim and knitwear. They are mainly subcontractors, but we also find the contractors and companies that make the finished product. 83 % of the workforces are employed in the production of clothing.
5. **Other relevant technologies/processes** present in the sector: spinning, knitting, dyeing and finishing, nonwoven, embroidery, screen printing, digital printing garment manufacturers and technical articles such as straps and ropes.
6. **Distinctive skills and/or competences of the sector:** denim pants, swimwear, lingerie, work wear in technical textile.
7. **Driving force of the sector:**
 - a. Know How in clothing manufacturing
 - b. Good quality of products with high added value
 - c. Proximity to the European market: reactivity and custom services
 - d. A good knowledge enabling staff to work any kind of items
 - e. A country more and more specialized in short time production
 - f. Long cooperation with the main European markets
 - g. Fast delivery, flexibility for small and medium quantities and Fast Fashion
 - h. Respect for social and environmental standards

2. HISTORY/EVOLUTION OF THE SECTOR

Driving forces of the past:

During a long period, the central region was only as a subcontractor for the following reasons:

- low cost of labour.
- proximity to Europe.

During the early 1970 the central region was the most important group of textiles and clothing in the south side of the Mediterranean, the T / C industry in central Tunisia reached its peak in the mid 1990 with approx. 240.000 employees representing 50% of the workforce.

The current business model has gradually evolved into mainly export to countries like, France, Germany, Italy and other European countries with major customers or retailers or brands.

Subsequent evolution and changes:

The textile clothing industry in the region has undergone constant transformation under the combined influences of increasing competition from low-cost producer’s countries and new investment opportunities offered by the relocation of the leading Europeans producers.

In fact, small and medium-sized manufacturing clothing Europe quickly relocated productions for intensive labour to Tunisia.

The relocation of these factories was necessary to maintain cost competitiveness especially after the signing of the free trade agreement.

Few numbers of EU programs have been funded to support the Tunisian textile and clothing sector. Many companies have invested to upgrade their businesses in technology but also in terms of productivity. Some industrial have even invest to develop their own brands.

Current situation:

In 2019, the value of textile and apparel exports increased by + 3.72% Tunisian Dinar (TD) and was down -1.41% in € compared to 2018. The clothing sector recorded growth of + 2.48% in TD and a decrease of -2.62% in €. The textile sector increased by + 11.57% in TD and + 6.28% in €.

For Warp and weft clothing, the increase in exports is around + 3.93% in TD while knitted clothing fell by -1.72% in TD.

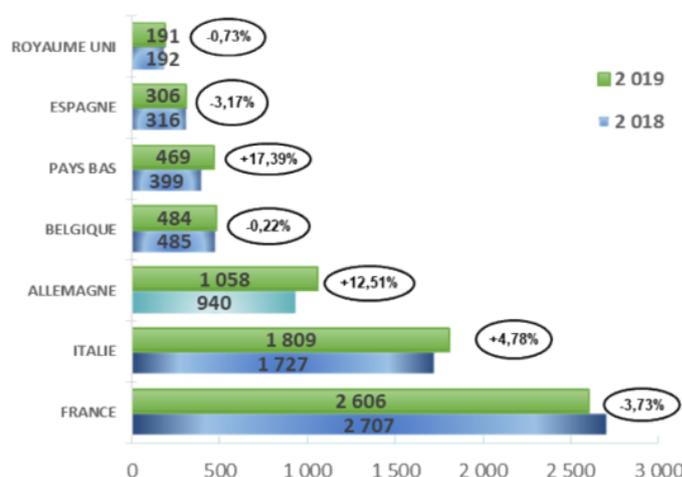
Analysis by market of chain and weft clothing exports shows growth in value (TD) on the main markets: Italy (+ 6.47%), Germany (+ 14.73%) and Netherlands (+ 10.45%). While France and Spain fell down respectively by -4.97% and -19.49% in TD.

In 2019, knitted clothing exports increase in DT to Italy (+ 0.48%) and Germany (+4.18%) and decrease to France (-7.77%) and Belgium (- 3.66%).

Textile sector exports increased by + 11.57% in TD. These exports increased in value in France (+ 6.59%), Italy (+ 11.73%), Spain (+ 50%) and the Netherlands (+ 34.73%). The most significant advances in the sector were made by yarns and yarns (+ 23.99% in DT), other textile products such as fabrics (+ 17.85% in DT) and household linen (+9, 98% in DT).

Textile and clothing export in MDT

EXPORTATIONS TEXTILE -HABILLEMENT EN MDT
JANVIER - DECEMBRE



3. SWOT ANALYSIS

| Strengths | Weaknesses |
|--|--|
| <ul style="list-style-type: none"> • Competitive in “quality for value” items. • An emerging class of young entrepreneurs • Skilled and experienced executive and middle management • A still competitive labour cost. • Goodwill with major European buyers (brands, private labels) • Respect for social, environmental standards | <ul style="list-style-type: none"> • Low competitiveness vs. Asian countries for standard products (k factor: price) and for planned deliveries • Dependence on sales agents as well as on big customers in Europe • Poor attitude of SMEs to cooperate • Difficulties in finding a skilled workforce • Raw materials not available |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Large buying segments now require a mix of factors: quality, services (delivery and lots) and price which may be advantageous for Tunisia. • Tunisia is still an attractive destination for foreign direct investment • Tunisia industrial policy support the development of value-added operations (finishing, special treatments and digital printing). • Market using labels like, green producer, fair trade, preservation of natural resources and circular economy. | <ul style="list-style-type: none"> • Orders depending on a limited number of customers. • Difficult to finding a “right” market positioning between price, quality and services. • Financial problems of the Tunisian state, leading to additional taxes and other burdens, and very high degree of uncertainty • Increased costs of energy • General political instability in the area |

4. CHARACTERIZATION

- The T/C sector is moving towards higher value-added production.
- The orientation of the T/C sector towards co-contracting and the finished product
- Repositioning along the value chain (finishing, digital printing, circular economy and special treatments) and enlarge the extension of the value chain

K question:

How to become “European” and compete on quality, specialization, innovation without losing the cost competition advantage.

Central Tunisia Needs.

- Support the new generation of entrepreneurs
- Reinforce of the “entrepreneurial basis”: second/third generations
- Develop expertise on the added value phases (finishing, special treatments, circular economy, digital printing and dyeing)
- Access to new markets/customers

- Strengthen the local brands in fashion and home textile (styling, sourcing and marketing).
- Strengthen textile research, development and innovation, especially technical
- Strengthen cooperation and partnership with advanced partner countries in new areas such as sustainable development, energy management, circular economy...
- Development of new professional courses requested by the T/C sector
- Sector orientation towards industry 4.0

Central Tunisia Offers:

- The usual advantages of “value for money”, proximity and incentives for investments.
- A network of modern facilities to support the business (CETTEX/CRT, MFC pole, private service centres, laboratories and research centres, textile university...) including a lower cost of energy.
- A class of new entrepreneurs acting
- An emerging number of Hybrid companies and co-contractors.
- Good executive and operational managers and valid young technicians.
- Skills development for the following services: embroidery, screen printing, digital printing, special treatments, washing, dyeing and finishing.
- Modern and high-tech equipment

5. PERSPECTIVES.

Past development and current position of the Tunisian T/C industry

The Tunisian T/C Industry reached its peak in early '90s. At that time many European companies had already delocalized their sewing/confection units and/or were putting orders to local subcontractors (mainly C-MT: Cut, Make and Trim). Proximity to Europe, cheap labour and a very favourable legislation concerning FDI and exports, gave additional advantages to the Tunisian T/C industry.

The subsequent process of market liberalization and globalization (1995-2005) bringing in the European countries new and very aggressive Asian competitors which limited the development of Mediterranean exports, particularly on basic products with low added value.

These competitors such as China, Bangladesh, India and Vietnam are currently the main suppliers for EU distribution channels like retailers (private labels - department stores), chains “fashion for all” (Zara, Tommy, Guess, H&M, Benetton ...) and even important international French and Italian fashion brands.

Otherwise, in the same period, Mediterranean competitors like Turkey, which is an important European provider and Morocco (in particular for Spanish and French markets) have increased their exports to the EU and are taken advantages of some factors: raw materials sourcing, preferential agreement, incentives, political stability.

The financial crisis which affected EU countries in particular: Italy, Spain and France had significantly reduced garment consumption and which led to a reduction of European T/C imports.

The reduction of the average order (size), the sharp limitations of stocks by the traders, the explosion of product variants and the consequent shrinking of production lots, made less competitive the Asian suppliers who are better fit for planned and large orders.

Indeed, the Tunisian T/C industry reply to the new requests of customers by emphasizing the component “services” of their offer: customization, flexibility, quick response and maintaining the high quality of clothing manufacturing. In terms of costs (€/Min); Tunisia is not the cheapest country but, considering the total cost and the overall quality offered (product and service), it remains a leading European supplier of products with high added value.

The perspectives evolution of T/C Tunisian industry are multiple:

1. Development of new services for European markets to provide finished products and high added value products
2. Creating Tunisian brands
3. Development of niche products (in particular: technical and smart textiles)

Development of new export markets on EU countries and on other big markets like (Russia, Americas, ...).

1. Enhance productivity, quality management and sustainable development in industrial companies.
2. Reduce environmental impact and minimize waste or discharge treatment costs
3. Upgrade local SME processes throughout the textile supply chain, to increase the competitiveness.
4. Development of innovation and research applied to T/C sector.
5. Strengthen transparency throughout the supply chain.

Today, Tunisian companies are able to define product specifications and are able to access to outdoor markets. Some of them are managing the high “complexity” of their business model.

Examples of:

Advanced Co-contractors: SARTEX Group, DEMCO Group, ETC group, SIP group, Mahdco Tunisie, Enfavet Group, Bacovet Group.

Technical textiles: refer to Technical Textiles (mfcpole) report

The Tunisian T/C industry is increasingly independent in terms of entrepreneurship/management however it remains dependent on its main suppliers for the purchase of raw materials (yarns and fabrics) and also remains of its main customers which are France and Italy (57% of t/c Tunisian exports).

It would be necessary to “commercial” risk by:

1. Diversify the final products towards “fashion for specific markets” (Tunisia, Maghreb ...) or functions (technical, high performance clothing)
2. Develop businesses other than clothing manufacturing, in particular finishing (yarns, fabrics and garments).

3. Target other European promising markets (i.e.: Russia, Balkans) or even not yet developed areas such as sub-Saharan Africa (in particular francophone countries where Tunisia has an advantage).

The Human factor.

In the last fifteen years the most brilliant companies made significant efforts to move from the “subcontractors” in which there is a very low margins to capitalize on know-how and marketing for an independent entrepreneurial development. A number of them have been successful; Tunisia now is endowed with a significant class of experienced and mature entrepreneurs (self-made man). However, some of SME entrepreneurs are first generation (family enterprises) and manage business with old methods and equipment.

Fortunately, the “internationalization of business culture”, especially for young generations, can be facilitated by long standing cooperation with European leading companies.

Tunisian Know how is abundant compared to others countries, especially in clothing manufacturing but we have to strengthen this Know How in finishing industry, which is a key to perform T/C Tunisian industry by developing specialization as well for adding technical performances to the in new production niches like technical textiles.

6. KEY TOPICS: INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

The support measures are as follows:

- Tunisian upgrade program.
- National energy management program, ANME.
- Tunisian Export Promotion such as Tasdir +Project.
- SWITCHMED, MEDTEST III project (Circular economy).
- GTEX-Tunisia project, it offers technical assistance to Tunisian companies.
- Cooperation projects with universities and research units (CIRAT), International Conference of Applied Research on Textile.

Create various synergies between the different funds and the TEX-MED ALLIANCES project.

7. INTERNATIONAL ALLIANCES.

The Tunisian T/C sector is used to cooperate with foreign companies, the sector is very open, however in general the existing cooperation is not on equal basis. Therefore true “alliances” do not exist

mfcpole: Pôle de Compétitivité – Project Partner 4.
 Region/Country; Monastir - El Fejja, Tunisia

1. OUTLINE OF THE T/C SECTOR

THE “TECHNICAL TEXTILES (TT) & PROFESSIONAL CLOTHING” SECTOR IN TUNISIA

Note: the identification of a Technical Textile sector is rather recent. The statistical system for the collection data and information is not yet in full operation. Therefore, data and information are estimations or even lacking.

A) SIZE.

1. Number of enterprises in the Technical Textiles Industry: apx. 250 companies

2. Employment: apx. 28.000 people or 15% of total textile & clothing sector and 5.5% of total employment in the industry.

B) SPECIALIZATION.

1. Typical or prevailing products:

- a. the main products are in Clothtech*, Protech* (protection, functional wear)
- b. Work wear, Safety and protective clothing, uniforms, etc

2. Other relevant products: Hometech* and Mobiltech* products

3. Prevailing technology/production processes: clothing industries 80 %

4. Other relevant technologies/processes present in the T/C sector: weaving and finishing

5. Distinctive skills and/or competences of the T/C sector: technical skills, flexibility and responsiveness

6. Driving force of the T/C sector: Exporting companies.

(* Application sectors are those included in the First Tunisian Technical Textiles Sector Directory published by Mfcpole. They are the same as identified by the Techtexil Exhibition of the Frankfurth Fair).

- | | | | |
|-------------|--------------|--------------|----------------|
| 1. Agrotech | 2. Buildtech | 3. Clothtech | 4. Geotech |
| 5. Hometech | 6. Indutech | 7. Medtech | 8. Mobiltech |
| 9. Oekotech | 10. Packtech | 11. Protech | 12. Sporttech. |

2. HISTORY/EVOLUTION OF THE T/C SECTOR

Driving forces of the past:

Relatively low cost subcontracting costs, closeness to the EU Market, a cultural & Business advantages supporting exporting companies

Subsequent evolution and changes:

Increasing of labour costs, Emergence of niche markets, emergence of fast fashion, concurrence with Asian companies

Current situation:

Changing towards specialization and Production integration and products and Market diversification.

3. SWOT ANALYSIS

| Strengths | Weaknesses |
|--|--|
| <ul style="list-style-type: none"> • State support to TT R&D • Critical mass of the TT sector already existing • R & D & training facilities available (mfcpole role) • Presence in almost all manufacturing segments of the chain • Complementary skills • Competitive labour costs in TT | <ul style="list-style-type: none"> • A weak integration of the chain of value (upstream/finishing) • Newcomer in technical innovation • Lack of relations between firms • Lack of capacity of designing new products (a business to learn) • Difficulties to access to the local market |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Growth of Technical Textiles markets (overall) • Innovation Poles as tools for Co-operations between firms • Possibilities of EU/Tunisia co-operation • The optimization of the potential R & D | <ul style="list-style-type: none"> • Change of the competitive arena (Eu competitors) • A challenging market position between price, innovation and quality • Increasing competition in the TT sector • Technological changes • Entry Barriers (technology, regulation, ...) |

4. CHARACTERIZATION

- Technical Innovation at lower costs
- TT in a framework of public supports and facilities
- Upgrade well rooted skills in clothing manufacturing

K question:

How to enter an upscale market, choosing the segment, building up a “right” positioning and catching up with EU competitors.

Tunisian Technical Textiles Needs.

- Tunisian TT has to go beyond simple manufacturing of clothing. New product design skills are needed as well as technical and scientific linkages with the EU suppliers of innovative

inputs (materials and process) in order to transfer performances of the semi-finished products into the finished items.

- Develop expertise and know how on the added value phases mainly on spinning, weaving and finishing processes
- Access to new application markets and direct contact with final users customers

Tunisian Technical Textiles Offers.

- Modern structures and facilities (innovation poles) which can attract both collaborations for innovation and new investments for the business development (provide companies)
- A good class of technicians that can ensure technical competences and skills for the development and implementation of innovation projects.
- Facilities to access to the technical textile market of North Africa and to create joint venture export production companies.

5 PERSPECTIVES.

1. The Tunisian Technical Textiles sector.

The Technical Textiles cluster is composed of companies that manufacture Technical Textiles in Tunisia (entire country). This T/C sector has not geographical boundaries, but it is defined by technical/technological features of the products.

An effort to describe the Technical Textile sector has been recently conducted by mfcpole with the support of Unido. The final outcome of this exercise is the first “Annuaire Textile Techniques” which list 160 companies providing also their profiles.

The Tunisian Technical Textiles sector is composed of rather young companies; often operating in the so called “Cloth-tech” (workwear or functional wear) or Protech (Individual protection). In other words, also the Technical Textiles sector confirms clothing manufacturing as the main vocation for Tunisia. Since the technology used is very similar (sewing machines) a clear cut between technical and non-technical textile is difficult to draw. The Sector is still in search of a proper “personality”; the recently established association is working to this direction.

2. Technical Textiles within the T/C industry strategy for development.

By “nature” Technical textiles target market niches having a well-defined set of requirements; this makes the demand rather fragmented and, therefore, fit for specialized SMEs. Additionally, Technical Textiles must be “innovative” and innovation needs a support of R&D, laboratories and scientific inputs. Tunisia seems adequately endowed with facilities. In particular, the new facilities or initiatives for innovation which refer to mfcpole and Neotex in Monastir Park. However, an “internationalization” of its expertise is needed (in Tunisia as in all other sectors). Finishing is the key operation which provides extra performances to the product; therefore, the industry strategy that puts as a core objective “finishing” is consistent with the development of Technical textiles.

Many of the general consideration about the T/C industry and the external scenario, described above (Cettex report) are valid also for this report. The Tunisian TT sector needs to grow in terms of awareness of its possibilities. At a first analysis, the level of entrepreneurship is rather high as well as the facilities and the supporting initiatives.

Know-how is good in the final stages of production and must be complemented by expertise in other areas. Tunisian TT needs to develop partnership for technical and scientific improvement, diversification of products/technologies and market access.

The TT sector is “vital but young”. Within the project there are several opportunities to grow: Catalonia can be a strong partner for applications/products, Prato in the finishing and Macedonia for specialization in specific performances such as thermo protection, fire protection and other domains.

6. KEY TOPICS: INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

Recently, a number of initiatives dedicated to support small companies and SMEs in Monastir Cluster have been led by different partners and in particular by mfcpole. A specific focus is being done on internationalisation, innovation and circular economy.

6.1 Technical Textile Cluster of Sahel region (Monastir-Sousse and Mahdia), Cluster 2TS:

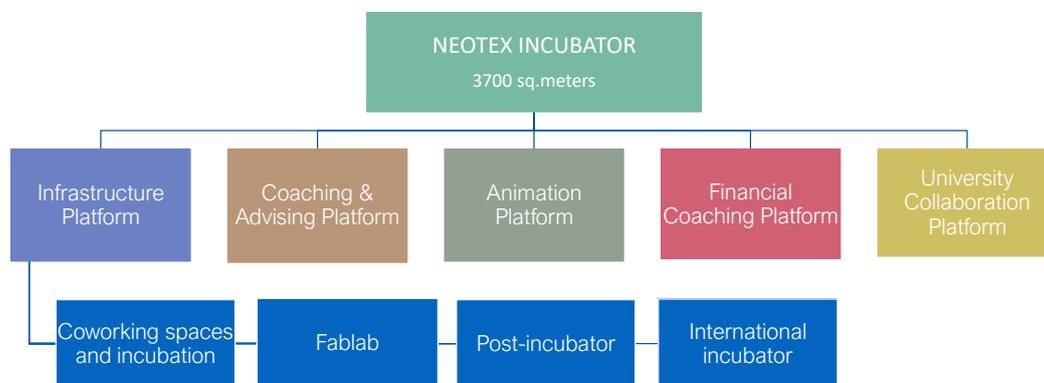
The association of Cluster 2TS was established in 2015 and gather actually 40 members including 30 SMEs. The Cluster is animated by mfcpole and has the aim to improve the competitiveness of the members by enhancing mutual collaborations. The cluster has been launching since December 2019, collaborative initiatives within the frame of different programmes and with the collaboration of actors from Monastir region (University, research institutes, support institutes) to elaborate a cartography on proposed innovation actions by SMEs.

- 61 proposed innovation projects by SMEs within the frame of RtoB initiative (led by GIZ, Laboratory of Textile Engineering LGTEX, High Institute of Technology Studies ISET Ksar Helal and mfcpole). Examples:
 - Lead time optimisation
 - Supply chain optimisation
 - Packaging management system
 - Renewable energy use
 - Rain water valorisation in the field of dyeing
 - Re-use of treated water
 - Digitalisation
 - Surface treatment
 - Development of Bio textile process
 - Integration of natural dyeing process into medical wear
 - Optimisation in digital printing
 - ...

- 16 innovation actions proposed by SMEs, Start-ups or research actors. Examples:
 - Implementation of a DDMRP algorithms package into the information system
 - Integration of smart sensors into textile materials for health monitoring
 - Composite Material for Automotive interior cabin and insulation made out from natural fibres
 - Advanced process for coating medical textiles with sustainable antibacterial nanostructures
 - Remote medical monitoring platform
 - Development of a solution to connect all our knitting machine in order get the production details, get the machine parameters, get the alarm details, get raisons of stops, have all the historical for production, run time, maintenance, quality ...
 - Use of fabrics based natural wool in the field of smart garments
 - Development of automatic detection systems, based on digital cameras, of faults in raw materials
 - ...

6.2- Incubation of start-ups.

Mfcpole has been launched an incubation and start-ups coaching program that targets more than 60 very small companies. The program offers a wide range of assistance and coaching services: ideation-prototyping-digital fabrication-patenting assistance-management-technology commercialisation-market access.



As far as digital fabrication is concerned, the program aims at getting students and engineers of Monastir University engaged in sustainable, self-determined production practices in order to foster local innovation and value creation. It will help SMEs profit from skills improvement to produce open source machines as prototypes.

6.3- Access to African market for functional wear SMEs:

This proposed action could be an output of the study led in the frame of the project to boost collaboration between Mediterranean SMEs, create alliances and accede to African market. It is to support collaboration between technology providers and manufacturers of workwear (including personal protection and corporate fashion) in their endeavours to access new markets, especially in Sub Sahara Africa.

1. Matching manufacturing companies with European brands and jointly enter Sub-Saharan African markets.

Here the idea of ‘Triangulation’ comes in. European companies tend to ‘fear’ the SSA markets for language, climate, security etc. The manufacturing companies (from Tunisia as example) should be producing the final product as this would make the venture more flexible.

2. Buyers profile

The targets can be divided into a) direct buyers such as oil, extraction, construction companies and b) market intermediaries such as wholesalers, retailers etc. In SSA, the focus could be on those buyers that can do all the needed to get the products into the market (customs, standards etc.) and distribute them there.

6.4. Bio-fashion market

A set of initiatives are conducted in Monastir Cluster to sensibiliser SMEs about the opportunities of Bio-fashion niche.

In this sense, mfcpole will organise a seminar by October 2020 to talk about trends and needs of this market. Several companies are starting to discover the process (SARTEX comp., DEMCO comp....). Some other initiatives are trying to focus on specific activities of the value chain, such as, natural dyeing. Natdyes is a start-up coached by mfcpole and that succeeded to re-use the waste of olive oil industry to produce natural colours. It has patented a process of natural dyeing and is collaborating with local companies to produce eco-friendly garments.

This could be a basis for building an alliance with brands and companies in European clusters (Prato for example).

7. INTERNATIONAL ALLIANCES.

The Tunisian T/T sector is used to cooperate with foreign companies, the sector is very open, however in general the existing cooperation is not on equal basis. Therefore true “alliances” do not exist.

German Arab Chamber of Industry & Commerce (GACIC): Project Partner 5

Region/Country: Alexandria, Egypt.

1. OUTLINE OF THE T/C COUNTRY/REGION

A) SIZE.

Egypt Textile Industry is a global giant and the second largest country's sector, contributing 30% of industrial production and 10% of total exports.

The size of Egypt's population is one of its other strengths. Its labour force, close to 18 Million, is an excellent source of productive and inexpensive labour combining semi-skilled, skilled and highly qualified employees. The labour force has grown at an average rate of 2.70% a year.

Egyptian Textile Industry consists of 4.500 factories employing more than 1 million workers.

The Egyptian Textile Industry has a complete vertically integrated functioning model, starting from raw materials up to finished products of Apparel and Home Textile. The module of the Industry functions with both; the local availability of the Egyptian cotton fibres and the imported fibres (polyester, viscose, wool etc.).

Low wages have encouraged the use of labour-intensive technologies. The weight of the work force of the Egyptian textile and apparel industries in Egypt's total employment does not exceed 7.7% which is the lowest compared to Pan-Euro and Pan-Med countries. Meanwhile, Egypt has become worldwide labour cost competitive, expressing the lowest textile total cost of labour, which, is considered a vital opportunity to grasp within the Pan-Euro-Mediterranean labour-intensive apparel manufacturing.

B) SPECIALIZATION.

The Extra Long Staple Cotton is world renown and Egypt enjoys substantial comparative and competitive advantages over other countries.

The advantages of the Egyptian Textile Industry stand on the in-house availability of the raw material of Egyptian Cotton, portions of which Turkey and India imports from Egypt in order to produce high quality products made of 100% Egyptian Cotton for the worldwide demand.

Fabric production includes fine Egyptian cotton fabrics, shirting, fabrics for trousers/shorts, worsted wool fabrics, denim, fleece, jersey, flat/woollen knits, technical fabrics, and more.

Apparel production includes active sportswear, outerwear, underwear, suits, socks, infant wear etc. Production of made-ups includes a wide variety of bed, bath and table linens, kitchen accessories, and other home textiles.

Government runs various training programmes, continuously upgrading the skill sets of the labour force and their managing personnel.

The location of the country facilitates quick and easy exports to other countries such as Asia, Africa, and Europe. Cargoes take less than 5 days to reach EU and 15 days to USA, turning it to a preferred sourcing location compared to its counterparts.

Egyptian Textile industry has clustered in the main areas of the country, where the infrastructure and commercial ports are well established for export easiness and simplicity.

New Textile Industrial Parks are being developed with more than 5 billion USD investment in the next 3 years.

Alexandria Governorate (region) plays a strategic role in the Egyptian T/C sector.

Historically it is the shipping point for exports to Europe and America (together about 75% of all T/C exports). It hosts the very large majority of the registered Export Agents.

Furthermore, the Alexandria governorate is geographically encompassed by the largest cotton production area of the Delta which grows the extra-long staple Giza 92.

Alexandria is an important trade/commercial area also for the domestic market as well as a manufacturing area.

The Alexandria University includes the reputed Textile and Weaving Engineering Faculty (est. 1960) and the region (governorate). Recently, a further development stemmed from the establishment of the QIZ in Borj el Arab where about 200 T/C companies, mainly ready-made garments (RMG) manufacturers, are located.

2. HISTORY

Egypt's expertise in the textile manufacturing industry has spanned many centuries, which make it a vital producer, exporter and importer. The production of the long staple Egyptian cotton started in 1822 and since then the T/C sector is a pillar of the Egyptian agriculture and manufacturing sectors. In the decades 1950-1980 the T/C sector saw a sharp increase of production capacity due to massive investments of the State-Owned Enterprises that create large and integrated factories with several thousands of workers. These companies, mostly production oriented instead of quality oriented, equipped with old fashioned machineries were unable to create sufficient added value and therefore they went into a restructuring phase that impacted on the entire T/C sector (public and private).

In the following years the industrial policy was much more open to the development of the private sector and promoted foreign direct investments through the instrument of the Qualified Industrial Zones. Currently the driving force of the T/C sector is the private sector domestic and foreign.

3 SWOT ANALYSIS

| Strengths | Weaknesses |
|---|--|
| <ul style="list-style-type: none"> • Long staples Cotton • Tradition of entrepreneurship in T/C. • Several FTAs easy access to USA/EU and other countries (Arab League Africa). • Favourable business/investment conditions for foreign investors (Free Zones) • Low production costs (labour, energy...) | <ul style="list-style-type: none"> • T/C Industry characterized by different situations, attitudes, vitality and “speeds” • Obsolete technology in large State Owned Enterprises SOE • Low efficiency of the economic and social environment. • Poorly skilled workforce and management |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Significant room for improvements in any segments of the value chain. • The growth of the Islamic fashion • Trading Crossroad between West and the Gulf, Africa and the Middle East areas • Strong adjacent sectors as tourism and transport/logistics. • Large domestic market | <ul style="list-style-type: none"> • Without a modernization, the production is likely to go from richer upstream activities to low value added downstream (CMT). • Lack of funds and resources for defending the competitive edge on cotton. • The breaking up of the supply chain of in separated segments will continue. |

4. CHARACTERIZATION

- High value cotton for top segment items.
- An “all encompassing” T/C sector (large/small; SOEs/private; upstream/downstream; local /foreign entrepreneurship; exports to EU and USA; old/new; western/middle-eastern ...)

K question:

Modernize the oldest part of the sector or lose value (for Egyptians)

Alexandria/Egypt Needs:

- Upgrade the overall “quality” of the sector also by recovering the spinning, weaving and dying/finishing phases
- Improve the production and marketing of the cotton fibre
- Improve skills of management and workforce

Alexandria/Egypt Offers:

- High quality of raw materials
- Easy access to large international markets (USA, EU, Gulf)
- Availability of young people to be trained as managers, technicians and designers.

5 PERSPECTIVES.

The Alexandria region plays a strategic role in the Egyptian T/C sector.

Historically:

- It is the shipping point for exports to Europe and America (together about 75% of all T/C exports)
- it hosts the Alexandria Cotton Exporters' Association (Alcotexa, the most reputed association for export of Egyptian cotton) and the very large majority of the registered Export Agents.
- The Alexandria governorate is geographically encompassed by the largest cotton production area of the Delta which grows the extra-long staple Giza 92 (second only to
- Alexandria is an important trade/commercial area also for the domestic market as well as a manufacturing area

6. KEY TOPICS: INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

Trade Agreements between Egypt and Other countries

EU-EGYPT ASSOCIATION AGREEMENT The EU-Egypt Association Agreement is in force since 2004. It creates a free-trade area between the EU and Egypt by removing tariffs on industrial products and making agricultural products easier to trade

AGHADEER: Egypt, Tunisia, Jordan and Morocco

GAFTA (Great Arab Free Trade Agreement): In February 1997, the League decided to create an Arab Free Trade Area, also known as the Greater Arab Free Trade Area or the Pan-Arab Free Trade Area, by 2008. This would be achieved through a 10% reduction in customs fees each year as well as the gradual elimination of trade barriers. Eighteen of the 22 Arab League states signed on to this agreement, which came into force on 1 January 1998. In March 2001, it was decided to speed up the liberalization process, and on 1 January 2005 the elimination of most tariffs among the GAFTA members was enforced. The 17 states that are members of GAFTA are: Algeria, Bahrain, Egypt, Iraq, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab Emirates and Yemen. Others are in the process of joining.

COMESA: For East and South of Africa. Egypt signed the agreement on 26.06.1998

MERCOSUR: Egypt signed on 3/8/2010 a preferential Free Trade Agreement (FTA) with the Common Market of the South (Mercosur), which allows preferential privileges for the Egyptian exports to enter the Latin American markets, and to reduce the cost of Egyptian imports from Latin American countries such as sugar, meat and soy oil.

Bilateral agreements:

- QIZ – USA-Israel-Egypt FTA
- Egypt – Turkey FTA
- Egypt – Russia Economic Treaty
- Trade accord – Egypt-China
- EFTA – Egypt-EFTA States FTA

Innovation Start-ups in the Textile Industry

Garment IO: Garment IO is a plug and play solution to the textile industry’s manufacturing needs. It is a SaaS that helps manufacturers improve their productivity by collecting real-time data from the production lines to help decision makers make data driven decisions.

Sigma Fit: Sigma Fit is a tech-wear company and fitness brand that creates revolutionary products to solve people’s everyday issues using technology.

Doodle Factory: The Doodle Factory is an Egyptian brand that utilizes the creativity of children to design fashionable apparel and stationery that help fund for children’s medical, educational, and shelter needs of the children.

Cotton Ball: Offers a variety of basic t-shirts in all colours, shapes, sizes, and designs made of the finest cotton providing high quality at an affordable price that could be worn as your daily staples.

Fashion Incubator ME: The First Middle Eastern Incubator shaping the Apparel and Fashion market through offering a 360 solution to emerging and established fashion designers, helping them launch their fashion brand. TFI also helps factories reach their maximum potential through consultation.

Larus (very early stage just passed incubation phase with youththinkgreen's Sustainability and Entrepreneurship Youth Program): Larus start-up aims to help the textile industry in Egypt, specifically the texturizing factories with the problems they face in the inconsistency of supply chain and the huge inventory and capital requirements, while trying to help and save our environment by using wasted PET bottles to manufacture polyester partially oriented yarn (POY).

“Fashion 180” - The Egyptian Junior Business Association (EJB)

Fashion 180 is an alliance of 10 Egyptian companies working in the textile industry and they launched an initiative called “Let’s produce in Egypt” aiming to form a strong entity that will be able to compete in international markets and enhance the local product. Their strategy is to support garment industry and attract more capital and new companies in addition to shed the light on new investment opportunities for the service industries and production supplies. All companies in the alliance are to sign an MoU in addition to an MoU to train and include less fortunate families, housewives and people with special needs.

Points of strength: over 15.000 workers, ability to produce over 50.000.000 pieces annually, export to more than 50 countries and more than 10.000 retailers and distributors across Egypt with over a million consumers. Means of cooperation: The alliance aims to have a full integrated cooperation between the whole textile industry starting from Yarn to the final consumers. To participate in international fairs under the same umbrella. Exchange of services and expertise. Training courses to both managers and workers. Opening of one mega store under one trade name in Egypt and many other countries. Challenges: Lack of service industries and production supply. Not using the Egyptian cotton in the best way possible. Invasion of international brands in the Egyptian market with competitive prices. Goals: One strong entity to withhold the risks. Access to New international markets and opening of mega stores. Supporting completeness and building a strong economic entity. Promoting investment. Enhancing the Egyptian product both locally and internationally

Better Cotton Initiative – UNIDO

The United Nations Industrial Development Organization (UNIDO), under the framework of The Egyptian Cotton Project, launched the Better Cotton Initiative (BCI) pilot in the country to support the Egyptian Cotton branding as part of a renewed drive to increase product sustainability, improve working conditions along the supply chain, and support cotton growers and relevant institutions in paving the way towards the pilot's national upscaling.

"The project's vision is to pilot the BCI standard system in Egypt to advance the cotton industry in a way that cares for the environment and the farmers growing it, through a multi-stakeholder programme jointly coordinated by UNIDO, relevant governmental entities, farmers' cooperatives, cotton and textile associations, and local and international private sector stakeholders," said The Egyptian Cotton Project's spokesperson. The BCI will strengthen the competitiveness of the Egyptian textile industry in the global market through a holistic approach to sustainable cotton production which covers all three pillars of sustainability: environmental, social and economic. Farmers will receive trainings and those who meet rigorous levels of sustainable production and employee welfare will be granted the BCI standard.

Funded by the Italian Agency for Development Cooperation, the Egyptian Cotton project is implemented by UNIDO in collaboration with the Ministry of Trade and Industry, the Ministry of Agriculture and Land Reclamation as well as with local and international textile private sector stakeholders. It also leverages the "Cottonforlife" CSR initiative by Filmar Group.

7. INTERNATIONAL ALLIANCES.

No international alliance complying with the requirements stated by the ENICBCMED Programme. Nevertheless, there are projects promoted and funded by international organizations that can be considered as temporary alliances.:

1. Project: Switch Med Programme (Road Map for scaling up Resource Efficiency))

Donor: funded by The European Union & UNIDO

Duration: 3 Years

Description:

- The project aims at increasing competitiveness of the national industries while preserving natural resources.
- It is building also on past experience through a large number of successive programs from 1994 till now (SEAM, FACE, EPAP, PSI, PPSI, ENCPC).
- The Roadmap is also building on the existing Egyptian legal framework which consists of environmental laws and regulations issued by a number of ministries: Environment, Industry, Planning, Labour, Irrigation, Housing and Interior.

2. Project: From cotton seeds to clothing: Enhancing the sustainability, inclusiveness and value addition of the cotton value chain in Egypt

Donor: UNIDO

Duration: 2 Years

Description:

- The project aims at enhancing the sustainability, inclusiveness and value addition of the long-staple and extra-long staple Egyptian cotton value chain, by improving the economic, social and environmental performance of cotton growers and cotton processors, and strengthening support institutions.
- The project capitalized UNIDO well established expertise on the value chain approach in Egypt and focus on the promotion of organic and noncontaminated cotton and local value addition (local content and processing), support resource efficient cotton processing, foster B2B linkages in the textile value chain, promote scientific research in the field of cotton, improve its quality, foster innovation in the textile sector, enhance the technical and entrepreneurial skills of Egyptian young women and men.

3. Project: G-TEX / MENATEX Project

Donor: It is co-financed by the Swiss Government under the Global Textiles and Clothing Programme (GTEX) as well as by the Swedish Government within the framework of Middle East and North Africa Region Textiles Programme (MENATEX).

Duration: The project will run until the end of December 2021.

Description:

- Through increased exports, the project will contribute to job creation in the textile and clothing sector. This objective will be achieved by improving the performance and services of the sector's trade and investment support institutions, and by improving the competitiveness of small and medium sized enterprises (SMEs).
- The project assists 35 small and medium-sized businesses operating in subsectors such as e.g. denim, knitwear, sport and leisurewear as well as men's shirts in addition to providing advice of improving dyeing & finishing operations for fabrics.
- Participating companies will be able to increase their international competitiveness and diversify their exports. This will be achieved through:

- Training, coaching and mentoring in value-added areas such as input supply, product and design development, export marketing and branding
- Improved business compliance with social and environmental standards required by buyers; especially with regard to the EU market
- Connecting companies to new markets and potential new buyers;
- Connecting companies to financing mechanisms that will provide trade finance to enable them to move to co-contracting and the finished products.

4. Project: CBI Project. Project information CBI value chain analyses Apparel and Home textiles in Egypt + Societal Cost Benefit Analysis (SCBA)

Donor: funded by the Netherlands Ministry of Foreign Affairs.

Duration: Starting Med 2020

Description:

- The mission of CBI is to connect Small and Medium Sized Enterprises (SMEs) in developing countries to the European market and thereby contribute to sustainable and inclusive economic growth.
- CBI does so by implementing:
 - 3-5-year projects in a specific export value chain (VC) in a specific county, focusing on seizing opportunities for exports to Europe and tackling obstacles that hamper or hinder these exports.
 - CBI
 - projects are integrated, meaning they involve both SME exporters and the export enabling environment.
 - CBI carries out four value chain analyses in Egypt, in the following sectors: IT Outsourcing, Tourism, Apparel and Home Textiles.

Amman Chamber of Industry (ACI): Project Partner 6

Region/Country Amman – Jordan.

1. OUTLINE OF THE SECTOR.

A) SIZE

1. Geographical perimeter of the T/C region relevant for the project (area covered and population): Area: 700km² out of total area of 89,342 km², Population: 2.200,000 or 40% of total population
2. Number of enterprises in the T/C Industry (latest figures): 142 (small workshops not included, as they are mainly not registered). Main big size manufacturers in Qualified Industrial Zones (QIZ): 75 companies
3. Total local employment direct T/C industry (latest figures): 19,000 out of approx. 73,138
4. Estimation of Total indirect employment (providing material inputs or services to the t/c industry such as: logistics, software, design, chemicals, packaging and hangers, consultants, technicians): About 400
5. Exports: Total (2018): \$1.812 Billion in exported textiles and garments goods; with over 84 % of it to the US (\$1,53 billion) ; EU exports are at about 3,4 % of the total (2018 figures is \$ 62,5 million).

B) SPECIALIZATION.

1. Core activity of the sector (characterization): Clothing manufacturing: casual, menswear (as in suits, pants, shirts and flat knits), Womenswear (knit and woven, lined items included). A big portion of work done is in what is called "qualified industrial zones". Production there is mainly done for export with a bit over 56% destined to USA. One of 4 such zones is in the greater Amman municipal boundaries.
3. Other relevant products: Underwear done mainly to the American market
4. Prevailing technology/production processes: Good level of high production machinery, including CAD/CAM and automated, specialised machinery
5. Other relevant technologies/processes present in the sector: Washing, Printing, embroidery and bounding
6. Distinctive skills and/or competences of the sector: Medium/high quality operators, good medium technical management and available logistics infrastructure
7. Driving force of the sector: The big independent producers, with either producers/retailers or big exporters profiles

2. HISTORY/EVOLUTION OF THE SECTOR.

Driving forces of the past:

Independent producers with products destined for the local and Arab markets

Driving force in the present:

Classic Fashion factory: Classic is now the leading garment manufacturer in the Kingdom. Its exports accounted for nearly 13% of Jordan's \$1 billion garment exports to the United States last year, according to Jordan's Trade Ministry. Established in 2003, it has grown from a small-scale operation (300 people, 130 machines and \$2 million turnover per year) to 15,000 employees, 7,500 machines spinning out close to 200,000 garments each day, and an annual turnover of more than \$250 million.

Subsequent evolution and changes:

Jordan's textile and apparel industry has benefited from numerous free trade agreements (FTAs) the country has signed as part of efforts to strengthen international cooperation and trade and increase its exports. Jordan has signed FTAs with the United States, European Union, European Free Trade Association, the Greater Arab Free Trade Area, Morocco, Turkey, Singapore and Canada.

Both the Jordan-United States FTA and the Qualified Industrial Zone (QIZ) agreements have significantly increased Jordan's access to the U.S. market. The Jordan-United States FTA went into force in 2001 and allows Jordanian products to enter the United States duty-free. The QIZ agreement went into force in 1998 and allowed Jordanian products made in designated areas and containing Israeli inputs to enter the United States duty-free and quota-free. The 2001 version of the US/Jordan FTA allowed for the exclusion of the Israeli factor. Together, the agreements have contributed to an increase in Jordan's apparel and textile exports to the United States from US\$50 million annually before 1999 to US\$1.8 billion in 2019. In 2010, the United States constituted 93 per cent of Jordan's total apparel exports, the CBJ reports, however since then the Jordanian industry has been successful in diversifying their clients base, and the US now represents a bit less than 57% of total export sales (2019 figures)

Current situation:

Textile & Apparel Trade Balance Report Flow: General Imports Into USA.

Customs value (Millions of Dollars)*

* <https://otexa.trade.gov/>

| Commodity | 2017 | 2018 | 2019 | % of change |
|----------------|--------------|--------------|--------------|--------------|
| Fabric | 0 | 0 | 0 | 0 |
| Made-Up | 3 | 6 | 9 | 64.13 |
| Apparel | 1,355 | 1,483 | 1,783 | 20.24 |
| Total | 1,358 | 1,489 | 1,792 | 20.39 |

The Jordanian textile and apparel industry's U.S. customers include brands and retailers such as Gap, JCPenney, Levi Strauss & Co., Liz Claiborne, Calvin Klein, Tommy Hilfiger, Walmart, Kmart, Limited, Sears, Columbia, New York Laundry and Victoria's Secret.

Jordan has been faced with numerous issues impacting its textile and apparel industry. A decreasing natural gas supply to the country and increasing oil prices have necessitated the import of more expensive fuel to generate electricity. This energy crisis, combined with regional tensions and the global economic downturn, has contributed to a slowdown in Jordan's economic growth.

As Jordan's tourism industry collapses in the face of regional chaos, revenue from garment manufacturing is becoming more valuable. Growing the sector and employing more locals and more women is the next challenge. And here, progress begets progress: nine months ago, Jordan's Ministry of Labour inked a deal to establish a new, partly-subsidized factory in the country's deprived Husseiniya district. The project guarantees 500 jobs for local women.

Jordan is working to improve labour conditions and human rights in the textile and apparel sector and elsewhere. In 2008, Better Work Jordan — a partnership between the International Labour Organisation and the World Bank's International Finance Corp. — was launched with the goal of improving compliance with labour standards in the apparel-manufacturing sector. Now Better Work Jordan runs a workers' centre at Al Hassan where foreign workers can access social support, prayer rooms, information on human rights and labour rights, and take part in social activities from holiday celebrations to games. The organization also offers employers training in labour law and human rights. The Ministry of Labour has mandated that all apparel-producing and - exporting factories participate in the program, which aims to boost the domestic workforce and to make the sector more competitive internationally by producing higher-end products.

With a busy, high-functioning port in Aqaba on the Red Sea and access to Israel's Haifa port through the Allenby Bridge crossing, Jordan is well placed to be a global manufacturing hub. Shipping from Jordan to the US is quicker and cheaper than shipping from Southeast Asia, and as Classic's Putharikkal points out, Jordanian factories are developing a reputation for good work delivered on time.

3. SWOT ANALYSIS

| Strengths | Weaknesses |
|---|---|
| <ul style="list-style-type: none"> • Specialization large volume productions • Favourable business conditions under certain circumstances QIZ, FTA. • Presence of local entrepreneurs able to grasp the growth of Islamic fashion • Production skills for CMT • Local Entrepreneurship, skilled imported management and easy and cheap workforce • Strong industrial infrastructure | <ul style="list-style-type: none"> • T/C sector boosted by “artificial” conditions and circumstances. • Dependence on imported management and labour. • Lack of trained local middle technical management (Designers, pattern drafters) • Expensive fuel and electricity. • Very little technical institutional support • Poor ability to attract local workforce • Scarcity of water (for wet technologies) |
| Opportunities | Threats |
| <ul style="list-style-type: none"> ➤ Worldwide growth of the Islamic dressing (a cultural opportunity) ➤ Concentrated domestic market (Amman) ➤ Only stable country in the region (compared to Syria, Iraq, WBG and Egypt) ➤ Supporting aid programs for economic and social development (UNIDO, USAid, EUaid, Gulf ,...) | <ul style="list-style-type: none"> ➤ High risk as the sector is depending only upon ➤ one kind of production (CMT) ➤ A narrow array of products (mainly casuals and sports-wear). ➤ Political Instability of the region. ➤ Weak domestic market |

4 CHARACTERIZATION

- Volume specialists
- America specialists
- Services provider to American customers

K question

To develop become the “Bridge” industry for:

1. Western fashion and Middle-East elegance
2. Add EU to America

Amman Needs:

- Markets/Products/Processes diversification
- Improve efficiency at smaller quantities.
- Good designers and product developers
- Market positioning (collection and brand) and market extension (local brands)
- Islamic clothing: Market development and structuring.

Amman Offers:

- Skilled management (operations); organization (HR management), efficiency for large units.
- Quality in manufacturing, knowledge of the local market and high sensitivity to customer behaviour changes
- Presence in a growing, potential market for Islamic elegance.

5. PERSPECTIVES.

There is no doubt that the QIZs- are the k factors that shaped the T/C manufacturing in Jordan. New and different business models are slowly emerging, such as:

- “own production” enterprises (local Brands) targeting the middle/upper class
- Enterprises of “Islamic wear/fashion”.

Both are in need of serious technical support, to become more competitive and more attractive to local/regional buyers

These three segments of enterprises:

1. Export oriented (large volumes)
2. Local Brands (whose style is close to western taste/fashion)
3. Islamic fashion for ladies

These segments are challenged by different scenarios and perspectives.

Segment 1: Export/Volume oriented.

“Quantity” is what they need to express their excellence.

This segment has the features of a “commodity sector” in which the price is the key marketing lever and costs are the source of competitiveness.

Indeed, the T/C industry has been designed for providing massive volumes of low-cost items (mainly casual and sportswear) to the big American retailers and brands. Jordanian contractors (actually, CMT subcontractors) set up plants focusing on high standardization of operations, controlled supply chain flows, lean production, high productivity, low taxation. The high productivity stems from an imported workforce from countries like Bangladesh, Nepal, Sri Lanka, Burma etc. organized and managed by Jordanian managers or imported skilled managers, mainly from India.

Efficiently managed and organized cheap labour combined with:

1. low costs of utilities (power, fuel, water),
2. affordable shipping costs for large quantities and
3. low taxation,

These elements have been providing competitiveness to Jordan versus other emerging countries. However, things started to change in recent years. Legislation put more attention to social issues, responsibility and costs of utilities surged to high levels. Currently, the Jordan T/C industry is less

cost friendly, competitiveness may be threatened. Volume contractors are therefore slightly modifying their business models. Now, they focus on “high duty” (in the USA) items, such as polyester instead of cotton which has a different taxation (38% vs. 14%) and/or more expensive or “elaborated items”. Companies improved their level of service in quality, lead time, etc. Additionally, they became aware that remaining as mere subcontractors is risky.

Specialized export companies started to evolve towards forms of co-contracting and/or are accepting smaller (although still big) lots. The political stability of Jordan, although still assured, can still flip to the wrong side anytime. However, one must note that; gone are the days when the Jordanians still depended on a single market (USA) with the USA now representing about 56.5% of all exports; this is a healthy sign! Then, somehow, the industry is still growing at a time when all common-sense indicators suggest it shouldn't be (see here security issues and rising costs)

Export to EU are modest (2017 figures is \$41.6 million). The new, simplified rules of origin agreement which was signed in 2016 and valid until 2030 (Duty free entry of Jordanian textiles, garments and footwear as long as these factories have at least 15% of their workforce consisting of Syrian refugees). Volumes are expected to increase. It must be noted, though, that European buyers are conservative, and they move very slowly; growth, there, will take some time.

Although export is expected to grow another 10%, on the Back of the China-USA trade war; Jordan will still need significant support and up-skilling to incorporate locally produced design into the regional and international market, as well as increasing the share of locally produced goods in the local market. Moreover, Jordan has a relatively weak supporting industry as almost all trimmings must be imported.

Segment 2: Local Brands of western style

Enterprises being part of this segment are (by far) of smaller size, often located outside the QIZs and the share of export, though significant, is balanced by domestic sales. In many cases these Brands add to manufacturing retailing to hold the marketing margin. Domestic clothing sales dropped by 60% in 2018, due to higher taxes and online shopping, creating a situation where the local brands are losing competitive advantages, and are in a desperate need for good technicians, designers and highly skilled labour. This is a typical case of a sector that has several links missing in its value chain, combined with less than perfect fashion design education resulting in many graduates ending up outside the industry. Potential demand for this positioning is limited not only because of the total amount of potential customers (urban middle-upper class) but because they are squeezed between well established and reputed international brands.

Companies need to revise their positioning, better defining their market niches and, possibly, find new markets in the region.

Segment 3: Islamic clothing (women)

The potential market is huge (worldwide: 800 millions of women) and growing fast.

The “rules of the game” are not yet fully established. What are the first inputs about this market of about 800 million potential customers?

The market is full of badly produced, boring colours covered with lots of small meaningless details. The concept of “fashion” must substitute the concept of “occasion”; and the concept of a collection as an effective marketing tool is yet to be discovered.

Islamic clothing cannot benefit from the powerful and articulated worldwide “marketing machine” which supports the western fashion industry. Identifying this need and implementing some changes will greatly enhance that market. Apparently Asian Muslim countries such as Indonesia and Malaysia as well as Turkey are more advanced in this field.

The style must respect various constraints. The price of an item may vary enormously, however the “average price is much lower than the “average price” of similar items for western styled products. Materials are different (almost entirely synthetic fibres), decorations (embroideries, laces, rhinestone insert, etc.) are fundamental and colours are more distinct.

Enterprises operating in this segment are re-defining their business model. Management is rapidly improving as the market is improving and developing; e-commerce is widely considered as an important channel. The muslim fashion seems a world very “traditional” (particularly to Western eyes) but it may become quickly a new “Eldorado” for enterprise able to catch still undiscovered opportunities. (see <https://www.alvinaonline.com>)

Young entrepreneurs and young managers are interested in this business in both Jordan and Palestine.

6. KEY TOPICS:

INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

1. Accessing the regional market.

As part of what TMA stands for, the access of Jordanian goods into the gulf region should be seen as a number one priority. Both western style garments and “Modest” fashion must create a niche for itself in the gulf region, and eventually in European countries where significant minorities would be very interested in “Modest Fashion”

2. Using technical textiles in “Modest Fashion”

Another highly overlooked, but valid possibility, is the use of technical textiles in modest fashion. Since modest fashion covers the whole body, these clothes become cumbersome and very hot to wear in the Middle Eastern hot summers. Technical textiles that are currently used, very efficiently, by sportswear producers can be tweaked for use for other purposes. The fibres being the same, these highly breathable, super-sweat-transporting qualities can be effectively used in modest fashion street wear.

3. Education and training.

Jordanian garments manufacturers and supporting institutions like ILO and Better Work – Jordan Initiative, plan to introduce garment design training to add value to a sector that is primarily CMT. This should benefit, in the first place the segments of the industry that are catering for the local and regional market, including that of Islamic wear, or what is referred to as “Modest fashion”.

JGATE, among other organizations are keen on bolstering local design: “the design centre is not helping the sector, which is why we are looking for new programmes: Says Farhan Ifram from JGATE

The QIZ industries are interested in raising their competitive advantages by providing more services to their big clients. Pattern drafting, grading and layout work should be an integral part of these services that aim to increase the value added of those industries above the usual CMT work.

6. KEY TOPICS: INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

On the issue of Innovation there are the following projects & Initiatives:

1. Project Title: “Fostering Innovation in the Jordan and Moroccan Textile Industry- FOSTEX”

- Project Budget 1,097 Million Euro

- Project partners:

- Amman Chamber of Industry - Jordan
- University of Science & Technology - Jordan
- Balqa Applied University – Jordan
- Several European Partners from Spain, Italy and Greece
- Several Partners from Morocco

Project Main Objectives:

1.To enhance innovation and competitiveness of the textile and garment manufacturing sector in both Jordan and Morocco covering areas of quality, advanced textile, innovation and development of high value added products.

2.To establish technical centres at Jordanian universities joining the project in order to provide services to the manufacturing sector as well as to the researches and students in the area of consultancy, training, quality, testing in addition to encouraging start-ups and entrepreneurs.

Main Progress until end of January, 2020.

1.ACI conducted a detailed field survey on the status, needs and development opportunities of the textile & garment manufacturing sector in Jordan, also development of survey results reports in addition to desk research reports.

Note: 40 Companies answered the survey questionnaire.

2. Specifying the equipment needed for the textile technical centers.

3. Start of the equipment tender procedures.

4. Development of the training plan for the centres staff, also for ACI staff covering areas related to the project.

2. Initiative Title: Jordan Garment Sector Alliance:

2.1 In December 2016, with a framework support by the World Bank, a garment alliance was formed and joined by the following stakeholders:

- Amman Chamber of Industry
- Jordan Garment, Accessories & Textile Exporters Association (JGATE)
- Garment Factories Syndicate
- Jordan Chamber of Industry
- Zerqa Chamber of Industry
- Irbid Chamber of Industry
- Ministry of Industry & Trade
- Investment Commission

The mentioned stakeholders adopted a sector declaration to form the mentioned alliance

2.2 The goal of the alliance is to play a main role in the policy advocacy, effective debate and consultation with the Government by raising the garment & textile sector issues, obstacles, challenges and strategies.

7. INTERNATIONAL ALLIANCES.

No International alliance is active in Jordan in compliance with the definition of alliance as in ENICBCBMED: *“An alliance has to be legally established, include MSMEs from at least three countries and have a governing body supporting the implementation of at least one result indicator among those listed under Priority A.1.2. Business alliances can include both MSMEs and BROS business representing organizations (for instance industry associations, chambers of commerce).”*

Palestine Federation of Industry (PFI) - Project Partner 7

Region/Country: West Bank – Palestine Authority.

1. OUTLINE OF THE T/C SECTOR.

A) SIZE

- Geographical perimeter of the relevant T/C region (area covered and population): Area: Approx. 5640km², Population: 2.800.000 (Figures for the West Bank Only)
- Number of enterprises in the T/C Industry (latest figures): 460
- Total turnover of T/C Industry (2017 figures):
 - Total textiles and garments (HS codes 61, 62 and 63) was \$9.846.000 in export, almost only to Israel. T
 - Total export sales to Israel in 2017 was \$200,000,000 a 14.6 rise over the 2016 figures.
 - Total exports for the year 2017 were \$1.056.500.0000 (According to PCBS)
- Total local employment direct T/C industry (latest figures): 5.800
- Estimation of Total indirect employment (providing material inputs or services to the t/C industry such as: logistics, software, design, chemicals, packaging and hangers, consultants, technicians): 600

B) SPECIALIZATION

Core activity of the sector:

- Circular knitting, home textiles (Towelling), CM-Light knitwear, CM-T women fashion (Non-lined items). No heavy confection production
- Other relevant products: terry cloth, denim (Sewing and washing)
- Prevailing technology/production processes: machinery is generally old due to the downward trend and the lack of the availability of proper maintenance, the industry is hesitant to invest in hi tech.
- Other relevant technologies/processes present in the sector: CAD available in a couple of training institutions
- Distinctive skills and/or competences of the sector: Experienced machine operators, over 50 years' experience in circular knitting, weaving and dyeing.
- Driving force of the sector: The big producers like Arja Textiles.

2. HISTORY/EVOLUTION OF THE SECTOR.

Driving forces of the past:

Tubular knitting and terry cloth weaving, a big percentage of CM-T producers providing a healthy value added.

Subsequent evolution and changes:

The Palestinian Garments production sector is heavily reliant on the Israeli industry, working as subcontractors. Due to competition from international brands and the rise of internet buying, the Israeli manufacturers are closing down, bringing down with them their suppliers and CMT producers. With no formal sector support to the industry and limited knowhow of product development and marketing, the sector is at a loss of where to go. Factory owners have, since some time, invested their capital in other economic sectors seen as “safer” investments, mainly real estate and tourism. The difficult logistics situation created by Israel has further weakened the industry and effectively eliminated many companies. In a weakening economy; the irregular import of left-over stocks from China and Turkey has exasperated the situation creating an absurd market reality, where products were selling in the market for less than the cost of fabric.

Current situation:

The Textile garments industry in Palestine is divided into 3 subsectors:

1. The subcontractors: CMT or MT production for the Israeli companies. These are the vast majority of the registered companies
2. The manufacturers: mainly concentrated in the southern West Bank, these are the fabrics producers and the vertically integrated circular knitwear producers
3. The product developers/producers selling in the local market, with fabrics sourced abroad.

The subcontractors are losing business due to the repeated bankruptcies of the Israeli manufacturers, who cannot compete with the international brands and online shopping in their own market.

The local market: Awash with cheap and unregulated imports, the local industry has lost ground, yet again to imports. The exception is underwear from the Bethlehem sector which has long enjoyed a good reputation. A big amount of sportswear, socks, polo shirts etc. are using international labels unlawfully. Palestine has not signed the intellectual property act. However, this represents less than 3% of local market consumption, so although it is growing, it is rather insignificant. The economy in Palestine is devastated due mainly to restrictions imposed on both industry and the population in general by Israel. With over 30% unemployment (and no social system to compensate the unemployed) it is a poor man's economy and the products catering for this economy is cheap, and of relatively low quality.

CM-T is, by far, the biggest industry activity, much of which is undeclared and falls into the "black economy" sections, this is the reason why figures available on the sector are, in a way, misleading. The majority of CM-T activity is done for the Israeli producers or producers / retailers and is, in general, of a relatively higher quality. However, the production of complicated construction confection (lined items like jackets, coats, etc.) is very limited.

A small amount of supporting industries like label making, elastic tape and similar products are available locally, while all other accessories are imported (Thread, zippers, buttons, etc.)

3. SWOT ANALYSIS

| Strengths | Weaknesses |
|---|--|
| <ul style="list-style-type: none"> • Multicultural environment, mix of western and middle east (Levant) values • Still existing technical skills • Experienced entrepreneurs • Great adaptability; ability to do business in very dire and unpredictable conditions • Relatively inexpensive labour (€200 – 300 a month) | <ul style="list-style-type: none"> • Obsolete technology • Small and old production capacity • Limits to business freedom • Difficult and expensive logistics, • Expensive fuel, water and electric power • Limits to k inputs (i.e.: oxygen, chemicals) |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • FTAs signed with USA, Canada, EU and Turkey. • Growth of Islamic fashion (market, new designs, new products,) • Positive fall out of tourism on sales (hotel equipment) and publicity of local production. • Support of international agencies for economic and social development. • Provide more services to the remaining Israeli companies to increase value added | <ul style="list-style-type: none"> • Drain of financial and human resources attracted by “easier” sectors (tourism, real estate) • Lack of good quality VET and technical training facilities • Aging of competencies and disappearing of skills. • Lack of employment opportunities for young and educated persons. • Political instability. |

4. CHARACTERIZATION

- Survive despite all
- Small but international
- Locked but linked.

K question:

Is the T/C sector worth of new investments in Palestine?

1- It is a story of starting from scratch again! Proper training in product development, branding and marketing will lead to the access of fashion items, including modest fashion, that are designed for the specific requirements of the local market with a trendy touch.

2- Increasing the competitive advantages (trendiness and quality, collections, labelling, packaging, advertising) of the Bethlehem area underwear subsector

West Bank/Palestine Needs:

- Identify new opportunities for investments (ideas, strategies, etc.)
- Training young people in product development and modern marketing methods
- Develop new sales opportunities to re-launch the turnover even if the search for new sales in the current framework may be very difficult. New sales can come only from new ideas.

Bethlehem/Palestine Offers:

- Free access to USA, CND, EU, Turkey.
- International minded Entrepreneurship
- International links
- Technical production capabilities (in particular for customization).

5. PERSPECTIVES.

The mission on site confirmed the industry situation described in the Data Collection document as well as the SWOT analysis therein presented by PP UPTI.

The visits to enterprises and institutions in the areas of Tulkarm and Bethlehem provided significant additional value for figuring out possible cross border initiatives within the framework of the project.

When referring to Palestine we must take into consideration the very special and difficult environment in which firms operate. Restrictions to the local businesses stem from many sources including the prevention of certain inputs (example: Oxygen 48 volumes or other chemicals), strict limitations in, free (or efficient) circulation of goods and persons within Palestine, the very high costs of energy water and fuel.

Actually, in Palestine the economic sectors which offer better (and good) business opportunities nowadays is tourism which has a multiplier effect on many other related sectors: real estate, hoteliers, catering, transport, travel agencies, laundry services as well as on: handicrafts (souvenirs), local food, restaurants.

In the last 15/10 years large amount of capitals has been transferred from the industry (and the T/C industry in particular) to this sector.

Investment portfolio choices accelerated the decline of the Palestine T/C sector and, consequently, the further loss of its competitiveness which was already threatened by globalization.

Today machinery and equipment is largely obsolete, production premises are old, plants lay outs are hardly rational and logistics (even internal) is often complicated.

Given the very dire conditions, it is surprising that a significant T/C sector still survives in Palestine. The main reason of this resilience resides on the high level of entrepreneurship in the region as well as to the deep links (economic, moral and cultural) of entrepreneurs to the T/C industry. However Very seldom the second (or the third) generation of entrepreneurs remain in the T/C business.

Often, Palestine entrepreneurs hold family links at international levels, manage businesses based abroad and are open minded. This is the real strength of the T/C industry Palestine.

In order to survive, companies have few strategic options.

According to their business model:

- a) CM-T subcontractors (mainly supplying Israeli customers):

- Provide additional value by ensuring good manufacturing quality for small lots (from sewing to packaging)
- Target “higher market niches” which require a “total consistency” in the product: quality of materials, design, quality of manufacturing, packaging, etc. which are not easily found (examples: product made in organic materials).
- Start their own brands, through the acquisition of knowhow and the use of local fashion designers

b) “Own production/own brand” enterprises:

- Increase the total margin of the business by adding downstream activities (retail) to the original manufacturing business (for selling own manufactured and traded items). Therefore targeting only the local market (Palestine) and – possibly - nearby regions (Israel, Jordan, Syria, Egypt,).
- Target specific market segments which are less open to the international competitions such as the demand for “Islamic fashion/dressing”
- Overcome the limits in distribution and marketing by considering e-commerce
- Take advantage of tourism as a mean for sales and brand positioning.
- Provide customized products for non-T/C clients (example: customized printed t-shirts for brands, companies, events ...)

In the current situation there is no entrepreneur willing to renovate facilities or invest in the T/C manufacturing in Palestine. The process of technical obsolescence is most likely to continue till its exhaustion. Some niches will resist longer but without new investments also they shall succumb. Only significant successes in the aforementioned strategies, in particular the integration with downstream operations in the local market of catching of market opportunities in the markets of the region, the ability to develop an “a-territorial” business idea (e-commerce and distribution from other places than Palestine) or the success in specific niches or segments can change the trend.

6. KEY TOPICS: INTERNATIONALIZATION, INNOVATION, CIRCULAR ECONOMY

A glimmer of hope lies in an UNIDO implemented T/C project in the northern West Bank. It is based on the idea that creativity is one of the important key elements strengthening competition; the project aims at establishing a “Fashion Design Centre” to support local and regional market access.

Young designers are coached and trained to address practical solutions in product development and team up with certain producers in accessing the local market first.

There is still a niche for some well-designed, well produced medium quality products being marketed through the creation of a brand (or brands). Although this project will only address a pilot level activity, there is much that can be gained in furthering the idea and make use of the Fashion Design Centre through TEX-MED ALLIANCES.

7. INTERNATIONAL ALLIANCES.

No International alliance is active in Palestine in compliance with the definition of alliance as in ENICBCBMED: *“An alliance has to be legally established, include MSMEs from at least three countries and have a governing body supporting the implementation of at least one result indicator among those listed under Priority A.1.2. Business alliances can include both MSMEs and BROS business representing organizations (for instance industry associations, chambers of commerce).*

The possibility of an international alliance with some other TMA partners could be one of the successes of accessing the local market, on a small scale however.

Partnerships with other Arab partners, Jordan in Particular, could be another strong point as the markets are very similar, and the creation of modest fashion should be the top priority. Knitwear and denim products are produced in Palestine, and experience there is of a high level. What is essential to understand is that, in denim for example, the 5 pocket jean is not competitive, but making modest fashion using that trendy fabric will appeal to many young people. In short; the principle activity is to reach competitive advantages through thinking outside the box.

PART 3: CONCLUSION.

Since long, the Mediterranean basin sees many and different form of cooperation among SMEs and BROs of the T/C sector. Commercial and Industrial partnerships have been and are very common at different levels. Subcontracting, co-contracting, foreign direct investments, trade agreements and common initiatives are the usual forma of cooperation. Several thematic or sectoral projects funded by the European Union or other multilateral organizations (such as UNIDO) or bilateral cooperation agreements may be considered additional forms of cooperation.

Furthermore, the present study indicates that, in theory, there are many opportunities for setting up new alliances among SMEs and BROs of the project area.

However, currently, there is no alliance among SMEs and/or BROs of the Project area that complies with the requirements set in the ENI CBCMED Programme as outlined here below:

a. INDICATIVE MONITORING AND EVALUATION PLAN.

Note 30. Page 26

“Alliances: *This definition includes **consortia, partnerships, clusters, networks** as part or not part of a value chain configuration. Here we refer to the number of **all forms of business alliances and cross border enterprises partnerships**, and particularly Euro-Mediterranean **clusters, consortia, networks and value chain agreements** in traditional and non-traditional sectors that are established as a consequence of the programme support”.*

b. FAQ 1.21: What is a business alliance? Published on 03.10.2017

*Priority A.1.2 refer to the “**Increased number of MSMEs participating in Euro-Mediterranean enterprise alliances**” as expected result. While no template is available to set up a business alliance, this latter **has to be legally established**, include MSMEs from at **least three countries** and have a **governing body** supporting the implementation of at least one result indicator among those listed under Priority A.1.2. Business alliances **can include both MSMEs and BROs** business representing organizations (for instance industry associations, chambers of commerce).*

We can only say that TEX-MED ALLIANCES is the only “temporary alliance” currently existing in the T/C sector of the Mediterranean Basin.

Therefore, the Base Line for Alliances is zero.